

Q7300H Communicating Subbase System Integration User Address Manual

SYSTEM INTEGRATION MANUAL

APPLICATION

Use Excel LonSpec™ Software to configure the T7300F/Q7300H Thermostat/Subbase for specific applications. The Excel LonSpec™ User's Guide, form 74-2937, provides software operation instructions for the personal computer. A complete list of Q7300H user addresses follows.

Q7300H USER ADDRESS NETWORK VARIABLES.

The following tables provide the applicable details for the network variables found in the Q7300H.

Table A1. Miscellaneous Points.

Table A2. Configuration Points.

Table A3. Status Points.

Table A4. Alarm Points.

Table A5. Shared Points.

Table A1. Miscellaneous (Left).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
AssignNode	AssignFile	node	1 to 127		0
AssignObjId	AssignFile	ObjectId	0 to 65535		0
AssignSchedId	AssignFile	ScheduleId	0 to 65535		0
AssignSubnet	AssignFile	subnet	1 to 255		0
AssignNrObj	AsssignHdr	NumOfObjects	0 to 65535		4
ApplicationType	nciAppVer	application_type	0 to 255		0
BypTime	nciBypassTime		0 to 3		480
DeviceName	nciDeviceName	ch[18]	0		0
BugVersion	nroPgmVer	bug_ver	0		See Rev Number
EVObjectIdIn	nviRequest	object_id	0 to 65535		1
EVObjectRqst	nviRequest	object_request	Normal Disabled UpdateStatus SelfTest UpdateAlarm ReportMask Override Enable RemoveOverride ClearStatus ClearAlarm AlarmNotifyEnabled AlarmNotifyDisabled ManualControl RemoteControl Program Null	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 -1	0
ObjectID	nvoStatus	object_id	0 to 65535		0

(continued)

Table A1. Miscellaneous (Right).

User Address	Comments
AssignNode	Node number of the mode to which this node is bound.
AssignObjId	Assigned object number of the object in this node to which this node is bound.
AssignSchedId	Assigned object number of the schedule object in this node. This should be the same for all four entries and should be set to SchedulId in the schedule file by the configuration tool.
AssignSubnet	Subnet number of the node to which this node is bound.
AssignNrObj	There are four entries in this field that specify which nodes are related to the schedule. The four entries specify which node is bound to the four nvoOccSchudleX outputs; 0 = nvoOccSchedule0, 1 = nvoOccSchedule1, 2 = nvoOccSchedule2, 3 = nvoOccSchedule3.
ApplicationType	Future use.
BypTime	Time between the pressing of the Temporary Occupied button on the thermostat (or initiating Bypass via DestManOcc) and return to the original scheduled state. DestBypass does not start the Bypass timer. This field sets the <i>duration of temporary override</i> parameter (Installer Setup Parameter No. 26) in the T7300. When the bypass state has been activated, the bypass timer is set to BypTime. The only valid bypass times allowed are 60 minutes, 180 minutes, 480 minutes, or 720 minutes. If BypTime is not set to one of these times, the subbase automatically changes the BypTime to the nearest valid time.
DeviceName	18-character field that identifies the node uniquely as one object at the site or project. Contents of DeviceName is maintained by a management node. If DeviceName is all ASCII blanks, it is unconfigured.
BugVersion	Software version per E-Bus Mechanism document.
EVObjectIdIn	EVObjectIdIn selects the object being referenced by nviRequest. All other EVObjectIdIn are invalid. The objects in the node are: 0—Node Object; 1—Thermostat Object.
EVObjectRqst	Normal—Report the status (via nvoStatus) of the object addressed by EVObjectIdIn and enable automatic control of all outputs. (See StatusCmdMode). UpdateStatus—Report the status (via nvoStatus) of the object addressed by EVObjectIdIn. ReportMask—Report the status bits that are supported in nvoStatus by the object addressed by EVObjectIdIn. Bits that are supported by the object are set to one. The other fields are set to False. Enable—Enable automatic control outputs. (See StatusCmdMode). Disabled—Disable automatic control and turn off all outputs. (See StatusCmdMode). AlarmNotifyDisabled—Disable alarm reporting. AlarmNotifyEnabled—Enable alarm reporting. ManualControl, SelfTest, Updatealarm, Override, RemoveOverride, ClearStatus ClearAlarm, RemoteControl, Program, Null, Other Unspecified Value—Not supported. NvoStatus returns an InvalidRequest in the object status.
ObjectID	Set to the current value of EVObjectIdIn.

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Table A1. Miscellaneous (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
FileDirAddress	nroFileDirectory		0		
FileLength	nviFilePos	rw_length	0 to 65535		0
FilePointer	nviFilePos	rw_ptr	0		0
FileAuthOn	nviFileReq	auth_on	Off On	0 1	0
FileDomain	nviFileReq	domain	0 or 1		0
FileIndex	nviFileReq	index	0 to 65535		0
FileNode	nviFileReq	node	1 to 127		0
FilePriorityOn	nviFileReq	prio_on	Off On	0 1	0
FileRcvTimeout	nviFileReq	receive_timeout	0 to 65535		0
FileRequest	nviFileReq	request	FR_OPEN_TO_SEND FR_OPEN_TO_RECEIVE FR_CLOSE_FILE FR_CLOSE_DELETE_FILE FR_DIRECTORY_LOOKUP FR_OPEN_TO_SEND_RA FR_OPEN_TO_RECEIVE_RA FR_NUL	0 1 2 3 4 5 6 -1	0
FileRetry	nviFileReq	retry	0 to 6		0
FileStatDomainId	nvoFileStat	domain_id	0		0

(continued)

Table A1. Miscellaneous (Right Continued).

User Address	Comments
FileDirAddress	FileDirAddress specifies the Excel 10 location address of the configuration parameter directory.
FileLength	Used when the file is opened for SENDING or RECEIVING RANDOM access files. FilePointer is first byte transferred from the beginning of the file. FileLength is the length of the file transfer.
FilePointer	Used when the file is opened for SENDING or RECEIVING RANDOM access files. FilePointer is first byte transferred from the beginning of the file. FileLength is the length of the file transfer.
FileAuthOn	Used when the file is opened for SENDING. Explicit address of the RECEIVER (either subnet/node or group address), retry count, a transaction time used for the request/response message at the end of every window and an indication whether authenticated and/or priority messaging should be read.
FileDomain	Used when the file is opened for SENDING. Explicit address of the RECEIVER (either subnet/node or group address), retry count, a transaction time used for the request/response message at the end of every window and an indication whether authenticated and/or priority messaging should be read.
FileIndex	Index number of the file to be opened.
FileNode	Used when the file is opened for SENDING. Explicit address of the RECEIVER (either subnet/node or group address), retry count, a transaction time used for the request/response message at the end of every window and an indication whether authenticated and/or priority messaging should be read.
FilePriorityOn	Used when the file is opened for SENDING. Explicit address of the RECEIVER (either subnet/node or group address), retry count, a transaction time used for the request/response message at the end of every window and an indication whether authenticated and/or priority messaging should be read.
FileRcvTimeout	
FileRequest	<p>FR_OPEN_TO_SEND—Opens indicated file to send entire file. Status returned can be FS_OPEN_FAIL, FS_XFER_UNDERWAY OR FS_XFER_OK.</p> <p>FR_OPEN_TO_RECEIVE—Opens indicated file to receive entire file. Status returned can be FS_OPEN_FAIL, FS_XFER_UNDERWAY OR FS_XFER_OK.</p> <p>FR_CLOSE_FILE—Closes the indicated file. Status returned is FS_XFER_OK.</p> <p>FR_CLOSE_DELETE_FILE—Closes and backs out any changes to the specified file. Status returned is FS_XFER_OK.. This is used for backing out of an aborted transfer. The file is restored to the state prior to the start of transfer.</p> <p>FR_DIRECTORY_LOOKUP—Retrieves the directory information for the specified file. Status returned is FS_LOOKUP_OF, FS_LOOKUP_ERR, OR FS_XFER_OK.</p> <p>FR_OPEN_TO_SEND_RA—Opens the indicated file for sending a portion of the file using random access. Status returned can be FS_OPEN_FAIL, FS_SEEK_WAIT, FS_XFER_UNDERWAY, OR FS_XFER_OK.</p> <p>FR_OPEN_TO_RECEIVE_RA—Opens the indicated file for receiving a portion of the file using random access. Status returned can be FS_OPEN_FAIL, FS_SEEK_WAIT, FS_XFER_UNDERWAY, OR FS_XFER_OK.</p> <p>FR_NUL—No operation.</p>
FileRetry	Used when the file is opened for SENDING. Explicit address of the RECEIVER (either subnet/node or group address), retry count, a transaction time used for the request/response message at the end of every window and an indication whether authenticated and/or priority messaging should be read.
FileStatDomainId	If the last operation was an FR_OPEN_TO_SEND, FR_OPEN_TO_RECEIVE, FR_OPEN_TO_SEND_RA, or FR_OPEN_TO_RECEIVE_RA, these fields contain the full address of the initiator. If there are multiple initiators then there may be several operations attempted concurrently on the same set of file transfer network variables. Each initiator is responsible for checking its own address against the value returned in the file status to ensure that it was granted requested access. An initiator must not close a file unless it was granted access.

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Table A1. Miscellaneous (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
MajorVersion	nroPgmVer	major_ver	0		See Rev Number
FileTxTimer	nviFileReq	tx_timer	0		0
FileTypeGrp	nviFileReq	type	0 to 128		0
InUseNumber	nviInUse		0 to 65534		Invalid
FileStatDomainLen	nvoFileStat	domain_length	0		0
FileStatInfo	nvoFileStat	file_info	0		0
FileStatNode	nvoFileStat	node	1 to 127		0
FileStatSize	nvoFileStat	size	0 to 65353		0
FileStatSubnet	nvoFileStat	subnet	0 to 255		0
FileStatus	nvoFileStat	status	FS_XFER_OK FS_LOOKUP_OK FS_OPEN_FAIL FS_LOOKUP_ERR FS_XFER_UNDERWAY FS_IO_ERR FS_TIMEOUT_ERR FS_WINDOW_ERR FS_AUTH_ERR FS_ACCESS_UNAVAIL FS_SEEK_INVALID FS_SEEK_WAIT FS_NUL	0 1 2 3 4 5 6 7 8 9 10 11 -1	0
InvalidId	nvoStatus	invalid_id	False True	0 1	False
InvalidRequest	nvoStatus	invalid_request	False True	0 1	False

(continued)

Table A1. Miscellaneous (Right Continued).

User Address	Comments
MajorVersion	Software version per E-Bus Mechanism document.
FileTxTimer	Used when the file is opened for SENDING. Explicit address of the RECEIVER (either subnet/node or group address), retry count, a transaction time used for the request/response message at the end of every window and an indication whether authenticated and/or priority messaging should be read.
FileTypeGrp	Used when the file is opened for SENDING. Explicit address of the RECEIVER (either subnet/node or group address), retry count, a transaction time used for the request/response message at the end of every window and an indication whether authenticated and/or priority messaging should be read.
InUseNumber	<p>InUseNumber is used by a management node to indicate to all other management nodes that it is <i>logged on</i> to the Excel 10 node and that they should not try to interact with any of the Excel 10 network variables or configuration parameters. Before the management node reads or writes any network variables, the management node checks InUseNumber for a zero value meaning no other management nodes are already <i>logged on</i> and that a management node can log on to the node. Then the management node writes a number, 1 through 65534, to InUseNumber and periodically writes the same value to indicate that the management node is still logged on. If there are no writes made to InUseNumber for approximately 60 seconds, then the Excel 10 resets InUseNumber to zero to automatically log off the management node. Before interacting with any network variables, the management node verifies that the InUseNumber has not changed. The management node <i>logs off</i> by writing 0 to InUseNumber.</p> <p>During power up, an application restart, or return to on-line from off-line, the Excel 10 sets InUseNumber to 65535 to indicate to the management node that it is now on-line.</p>
FileStatDomainLen	If the last operation was an FR_OPEN_TO_SEND, FR_OPEN_TO_RECEIVE, FR_OPEN_TO_SEND_RA, or FR_OPEN_TO_RECEIVE_RA, these fields contain the full address of the initiator. If there are multiple initiators then there may be several operations attempted concurrently on the same set of file transfer network variables. Each initiator is responsible for checking its own address against the value returned in the file status to ensure that it was granted requested access. An initiator must not close a file unless it was granted access.
FileStatInfo	A sixteen character string with information about the file.
FileStatNode	If the last operation was an FR_OPEN_TO_SEND, FR_OPEN_TO_RECEIVE, FR_OPEN_TO_SEND_RA, or FR_OPEN_TO_RECEIVE_RA, these fields contain the full address of the initiator. If there are multiple initiators then there may be several operations attempted concurrently on the same set of file transfer network variables. Each initiator is responsible for checking its own address against the value returned in the file status to ensure that it was granted requested access. An initiator must not close a file unless it was granted access.
FileStatSize	The number of bytes in the last selected file.
FileStatSubnet	If the last operation was an FR_OPEN_TO_SEND, FR_OPEN_TO_RECEIVE, FR_OPEN_TO_SEND_RA, or FR_OPEN_TO_RECEIVE_RA, these fields contain the full address of the initiator. If there are multiple initiators then there may be several operations attempted concurrently on the same set of file transfer network variables. Each initiator is responsible for checking its own address against the value returned in the file status to ensure that it was granted requested access. An initiator must not close a file unless it was granted access.
FileStatus	Internal Use Only.
InvalidId	If EVOBJECTIDIN is not a valid object, InvalidId is set to True; otherwise it is set to False.
InvalidRequest	If EVOBJECTRQST is not a valid request for the object addressed, InvalidRequest is set to True; otherwise it is set to False.

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Table A1. Miscellaneous (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
MemFileAddress	MemFileDir	pData	0		
MemFileSize	MemFileDir	Size	0		
MemFileType	MemFileDir	Type	0		
MemFileVersion	MemFileDirHdr	Version	0		
MemNumFiles	MemFileDirHdr	NumFiles	0		
NrHeatStages	nciConfig	NrHeatStages	0		1
MinorVersion	nroPgmVer	minor_ver	0		See Rev Number
NodeType	nroPgmVer	id[4]	0		See Rev Number
NodeTypeNumber	nroPgmVer	node_type	0		See Rev Number
NrFiles	nvoFileStat	number_of_files	0		0
ManualControl	nvoStatus	manual_control	False True	0 1	False
NrSpecialDays	SchedFileHdr	NumOfSpecialDays	0		0
NrTemps	SchedFileHdr	NumOfTemps	0		0

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Table A1. Miscellaneous (Right Continued).

User Address	Comments
MemFileAddress	MemFileAddress specifies the address in the Excel 10 at which the file is located.
MemFileSize	For each file there is a record containing the MemFileSize, MemFileType, and MemFileAddress. MemFileSize is the length of the file.
MemFileType	Specifies the LonMark® file type entered into the file directory. Type 1 is a configuration parameter value file. Type 2 is a configuration parameter template file.
MemFileVersion	MemFileVersion (a one byte quantity) specifies the major/minor version of the file. The most significant nibble contains the major version number and the least significant nibble contains the minor version number.
MemNumFiles	MemNumFiles is the number of files in the directory. There is a MemFileSize, MemFileType and MemFileAddress record for each file following the MemNumFiles.
NrHeatStages	0-3 stages.
MinorVersion	Software version per E-Bus Mechanism document.
NodeType	NodeType is a four byte ASCII string indicating the type of node (model).
NodeTypeNumber	Numeric identifier assigned to the type of node specified in NodeType.
NrFiles	Internal use only.
ManualControl	When the control loop(s) are disabled and the outputs are controlled manually, then this bit is set to one; otherwise this bit is set to zero. Manual control of this product is initiated by executing the installer setup function at the thermostat front panel.
NrSpecialDays	There are no special days in this schedule. NrSpecialDays is always zero. Attempts to write another value causes the write to the file to be ignored.
NrTemps	There are no temporary schedules in this schedule. NrTemps is always zero. Attempts to write another value causes the write to the file to be ignored.

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Table A1. Miscellaneous (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
SelectedFile	nvoFileStat	selected_file	0		0
OpenCircuit	nvoStatus	open_circuit	False True	0 1	False
OutofLimits	nvoStatus	out_of_limits	False True	0 1	False
OutofService	nvoStatus	out_of_service	False True	0 1	False
ProgFail	nvoStatus	programming_fail	False True	0 1	False
ProgMode	nvoStatus	programming_mode	False True	0 1	False
ReportMask	nvoStatus	report_mask	False True	0 1	False
SchedHour	SchedFile	hours	0 to 23		0
SchedMinutes	SchedFile	minutes	0 to 59		0
SchedOcc	SchedFile	mode	Null Occ UnOcc Bypass Standby	-1 0 1 2 3	OC_NUL
NrTimeModes	SchedFileHdr	NumOfTimeModes	4 to 4		4
ScheduleId	SchedFileHdr	ScheduleId	0 to 65535		0

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Table A1. Miscellaneous (Right Continued).

User Address	Comments
SelectedFile	The index number of the file that was last selected for data transfer.
OpenCircuit	Not supported, set to zero.
OutofLimits	Not supported, set to zero.
OutofService	Not supported, set to zero.
ProgFail	Not supported, set to zero.
ProgMode	Not supported, set to zero.
ReportMask	Internal use only.
SchedHour	The hour of the event; 0 through 23 hrs.
SchedMinutes	The minutes of the event. T7300 implements event times in 15-minute increments. If values other than 0, 15, 30, and 45 are written, SchedMinutes is changed to the nearest permitted value.
SchedOcc	The occupancy state of the schedule can be one of the states listed. In case SchedOcc is not one of the permitted values, SchedOcc is changed to the SchedOcc(read) as listed: Occ, Bypass, Standby—Space is scheduled to be occupied. UnOcc—Space is scheduled to be unoccupied. Null and any other—Schedule entry is ignored.
NrTimeModes	There are four time mode events per day in this schedule. NrTimeModes is always four. Attempts to write another value causes the write to the file to be ignored.
ScheduleId	ScheduleId is assigned by a tool for later schedule identification by a user interface that displays or changes the schedule. Saved in EEPROM.

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Table A1. Miscellaneous (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
tAuto	nvoIO	Auto	Off On	0 1	Off
tBHeat	nvoIO	B	Off On	0 1	Off
tBuildId	nvoIO	BuildId	0		0
tcmBlockControl	nvoIO	cmBlockControl	Off On	0 1	Off
tcmBlockEquip	nvoIO	cmBlockEquip	Off On	0 1	Off
tcmBlockSchedandUser	nvoIO	cmBlockSchedandUser	Off On	0 1	Off
tcmBlockSchedule	nvoIO	cmBlockSchedule	Off On	0 1	Off
tcmBlockUser	nvoIO	cmBlockUser	Off On	0 1	Off
tcmBlockUserAndDisplay	nvoIO	cmBlockUserAndDisplay	Off On	0 1	Off
tcmResetWatchDog	nvoIO	cmResetWatchDog	Off On	0 1	Off
tcmUseNetSensor	nvoIO	cmUseNetSensor	Off On	0 1	Off
tCool	nvoIO	Cool	Off On	0 1	Off

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Table A1. Miscellaneous (Right Continued).

User Address	Comments
tAuto	User Mode Switch—Auto setting. True= selected, False= not selected. NOTE: Only one User Mode Switch may be True at a time.
tBHeat	Equipment output relay—B. True = On; False = Off.
tBuildId	Thermostat software build identification string.
tcmBlockControl	Thermostat control algorithm. False = enabled; True = disabled.
tcmBlockEquip	Thermostat or subbase controls HVAC equipment via relay outputs. False = thermostat controls outputs; True = thermostat blocked, subbase controls outputs.
tcmBlockSchedandUser	Thermostat user keys and thermostat time-of-day occupancy schedule enabled/disabled. False = enabled; True = disabled.
tcmBlockSchedule	Thermostat time-of-day occupancy schedule. False = enabled; True = disabled.
tcmBlockUser	Thermostat user keys enabled. Some keys may be disabled by the thermostat installer setup.
tcmBlockUserAndDisplay	Thermostat user keys and display are enabled/disabled. False – enabled; True = disabled.
tcmResetWatchDog	Not used.
tcmUseNetSensor	Sensor used to control space temperature. False = use thermostat ensor(s); True = use network sensor via communications subbase.
tCool	User Mode Switch—Cool setting. True = selected, False = not selected. NOTE: Only one User Mode Switch may be True at a time.

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Table A1. Miscellaneous (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
tCool1	nvolO	Cool1	Off On	0 1	Off
tCool2	nvolO	Cool2	Off On	0 1	Off
tCool3	nvolO	Cool3	Off On	0 1	Off
tCoolSetPt	nvolO	CoolSetPt	0		0
tCurrentOcc	nvolO	CurrentOcc	Occ UnOcc Bypass Standby Null	0 1 2 3 -1	0
tDateCodeMo	nvolO	DateCodeMo	0		0
tDateCodeYr	nvolO	DateCodeYr	0		0
tEconOn	nvolO	EconOn	Off On	0 1	Off
tEEPROMid	nvolO	EEPROMid	0		0
tEffectOcc	nvolO	EffectOcc	Occ UnOcc Bypass Standby Null	0 1 2 3 -1	0
tEmergHeat	nvolO	EmergHeat	Off On	0 1	Off
tEmHeat1	nvolO	EmHeat1	Off On	0 1	Off

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Table A1. Miscellaneous (Right Continued).

User Address	Comments
tCool1	Equipment output relay—Cool Stage 1. True = On; False = Off.
tCool2	Equipment output relay—Cool Stage 2. True = On; False = Off.
tCool3	Equipment output relay—Cool Stage 3. True = On; False = Off.
tCoolSetPt	Cooling setpoint used by the thermostat to automatically select heating and cooling and to control space temperature. tCoolSetPt is displayed when the thermostat is calling for cooling. See the section on Space Temperature Setpoint for more details.
tCurrentOcc	Occupancy state called for by the thermostat time-of-day schedule; Occ, UnOcc, Null.
tDateCodeMo	Future use.
tDateCodeYr	Future use.
tEconOn	Equipment output relay—Economizer. True = On; False = Off.
tEEPROMid	Future use.
tEffectOcc	Occupancy state called for by the thermostat including the local scheduler activation of Temporary Occupied or Continuous Occupied buttons; Occ, UnOcc.
tEmergHeat	User Mode Switch—EmergHeat setting. True = selected; False = not selected. NOTE: Only one User Mode Switch may be True at a time.
tEmHeat1	Equipment output relay (Emergency Heat stage 1). True = On; False = Off.

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Table A1. Miscellaneous (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
Time1Jan70	nciAppVer	time[4]	0		0
tEmHeat2	nvolO	EmHeat2	Off On	0 1	Off
tFanAuto	nvolO	FanAuto	Off On	0 1	Off
tFanOn	nvolO	FanOn	Off On	0 1	Off
tHeat	nvolO	Heat	Off On	0 1	Off
tHeat1	nvolO	Heat1	Off On	0 1	Off
tHeat2	nvolO	Heat2	Off On	0 1	Off
tHeatSetPt	nvolO	HeatSetPt	0		0
tHtPump	nvolO	HtPump	Off On	0 1	Off
tLEMode	nvolO	LEMode	Off On	0 1	Off
tMaxCIStg	nvolO	MaxCIStg	0 to 3		0
tHeat3	nvolO	Heat3	Off Of	0 1	Off

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Table A1. Miscellaneous (Right Continued).

User Address	Comments
Time1Jan70	Time1Jan70 (nciAppVer) is the time stamp of the last change to the Excel 10 application configuration. Time1Jan70 meets the ANSI C time stamp requirement specifying the number of seconds elapsed since midnight (0:00:00), January 1, 1970. It is represented in the Intel format. nciAppVer identifies the Excel 10 application number, version number and time stamp of the last configuration change. It is set by a management node during configuration and is typically read by any management node.
tEmHeat2	Equipment output relay (Emergency Heat stage 2). True = On; False = Off.
tFanAuto	User fan switch— Auto. True = selected; False = not selected. Only one user fan switch may be True at a time.
tFanOn	User fan switch— On. True = selected; False = not selected. Only one user fan switch may be True at a time.
tHeat	User mode switch - "Heat" setting. True = selected; False = not selected. Only one user mode switch may be True at a time.
tHeat1	Equipment output relay—Heat Stage 1. True = On; False = Off.
tHeat2	Equipment output relay—Heat Stage 2. True = On; False = Off.
tHeatSetPt	Heating setpoint used by the thermostat to automatically select heating and cooling and to control space temperature. tHeatSetPt is displayed when the thermostat is calling for heat. See the section on Space Temperature Setpoint for more details.
tHtPump	Subbase is configured to control; True = heat pump, False = conventional fuel.
tLEMode	Equipment output relay—LEMode. True = On; False = Off.
tMaxClStg	Maximum number of cooling stages allowed by the subbase.
tHeat3	Equipment output relay—Heat Stage 3. True = On; False = Off.

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Table A1. Miscellaneous (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
tMaxHtStg	nvolO	MaxHtStg	0 to 3		0
tNextOcc	nvolO	NextOcc	Occ UnOcc Bypass Standby Null	0 1 2 3 -1	0
tOCool	nvolO	O	Off On	0 1	Off
tOff	nvolO	Off	Off On	0 1	Off
tOKrdwrStPts	nvolO	OKrdwrStPts	Off On	0 1	Off
tPgmVer	nvolO	PgmVer	0		0
tPump	nvolO	Pump	Off On	0 1	Off
tReHum	nvolO	ReHum	Off On	0 1	Off
tSubBaseld	nvolO	SubBaseld	0		0
tSystemState	nvolO	SystemState	0		0
tTAT	nvolO	TAT	Off On	0 1	Off
tTmpSetPt	nvolO	TmpSetPt	Off On	0 1	Off

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Table A1. Miscellaneous (Right Continued).

User Address	Comments
tMaxHtStg	Maximum number of heating stages allowed by the subbase.
tNextOcc	Occupancy state called for next by the thermostat time-of-day schedule. Occ, UnOcc, Null.
tOCool	Equipment output relay—O. True = On; False = Off.
tOff	User Mode Switch—Off setting. True= selected; False= not selected. NOTE: Only one User Mode Switch may be True at a time.
tOKrdwrStPts	Future use.
tPgmVer	Each thermostat program code version has a PgmVerCode. Each subbase code version is only compatible with the tPgmVer specifically designed for subbase compatibility. The subbase reads the tPgmVer and checks for compatibility. If the subbase is not compatible, a tPgmVerAlrm is generated and the Q7300 no longer communicates with the subbase. If the subbase is compatible, the subbase uses tPgmVer to change its functionality to be compatible with the software version of the thermostat. The only tPgmVer currently recognized is 0.
tPump	Equipment output relay—Pump. True = On; False = Off.
tReHum	Equipment output relay—Relative Humidity. True = On; False = Off.
tSubBaselId	Future use.
tSystemState	The thermostat internal system state flag. Some of the values are listed in hexadecimal: A8 = Real time clock is invalid after thermostat startup. 7E = Continuous onoccupied state. 69 = Temporary occupied 9timed bypass) state).
tTAT	Equipment output relay—TAT. True = On; False = Off.
tTmpSetPt	A temporary setpoint is displayed and used by the thermostat; True = Yes, False = No.

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Table A1. Miscellaneous (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
unusedF1	nviFileReq	unused1	0		0
unusedF2	nviFileReq	unused2	0		0
tTuncos	nvoIO	Tuncos	0		0
tUserState	nvoIO	UserState	0		0
tValidDuctTemp	nvoIO	ValidDuctTemp	Off On	0 1	Off
tValidLocalTemp	nvoIO	ValidLocalTemp	Off On	0 1	Off
tValidRemoteTemp	nvoIO	ValidRemoteTemp	Off On	0 1	Off
UnitCool	nvoUnitStatus	cool_output	0 to 100 percent		
UnitEcon	nvoUnitStatus	econ_output	0 to 100 percent		
UnitFan	nvoUnitStatus	fan_output	0 to 100 percent		
UnitHeat	nvoUnitStatus	heat_output_primary	0 to 100 percent		
UnitSecHeat	nvoUnitStatus	heat_output_secondary	0 to 100 percent		

(continued)

Table A1. Miscellaneous (Right Continued).

User Address	Comments
unusedF1	Future use.
unusedF2	Future use.
tTuncos	The time until the next occupancy state in minutes.
tUserState	The thermostat internal user state flag. Some of the values are listed in hexadecimal; 01 = Normal operating state.
tValidDuctTemp	Status of thermostat duct temperature sensor. True = valid; False = invalid.
tValidLocalTemp	Status of thermostat internal space temperature sensor. True = valid; False = invalid.
tValidRemoteTemp	Status of thermostat remote space temperature sensor. True = valid; False = invalid.
UnitCool	UnitCool reports the current percentage of cooling stages turned on in Cool mode. If cooling is not configured, UnitCool is invalid.
UnitEcon	If an economizer is configured, UnitEcon reports the percentage that the economizer damper is open. If no economizer is configured, UnitEcon reports invalid.
UnitFan	Unit Fan reports the fan speed in percentage of full speed. If the fan is off, UnitFan reports zero.
UnitHeat	UnitHeat reports the current percentage of heating stages turned on in Heat mode. If heating is not configured, UnitHeat is invalid.
UnitSecHeat	UnitSecHeat reports the current percentage of emergency heating stages turned on when emergency heating is configured in a heat pump application. If emergency heating is not configured, UnitSecHeat is invalid.

(continued)

Table A1. Miscellaneous (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
VersionNumber	nciApplVer	version_no	0 to 255		0
Y1	nvoData	FieldNo	0 to 255		NoField
unusedR1	nvoStatus	reserved1	0		0
unusedR2	nvoStatus	reserved2	0		0

Table A1. Miscellaneous (Right Continued).

User Address	Comments
VersionNumber	VersionNumber identifies the version number of the Excel 10 application.
Y1	Future use.
unusedR1	Future use.
unusedR2	Future use.

Table A2. Configuration Points (Left).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
AuxContactorMode	nciConfig	AuxContactorMode	Off On	0 1	Off
BdTempOffset	nciConfig	BdTempOffset	0 to 10		0
CoolCycHr1	nciConfig	CoolCph1	4Cph 3Cph	4 3	4Cph
CoolCycHr2	nciConfig	CoolCph2	4Cph 3Cph	4 3	4Cph
CoolCycHr3	nciConfig	CoolCph3	4Cph 3Cph	4 3	4Cph
DeadBand	nciConfig	DeadBand	2 to 10		2
DispalyDegC	nciConfig	DegCTemp	Off On	0 1	Off
Display24Hr	nciConfig	Format24Hr	Off On	0 1	Off
DlcBumpTemp	nciConfig	sbDlcBumpTempS2	0 to 10		3
CoolOccSpt	nciSetpoints	occupied_cool	10 to 35°C (50 to 95°F)		23°C (73°F)
CoolStbySpt	nciSetpoints	standby_cool	10 to 35°C (50 to 95°F)		25°C (77°F)
CoolUnoccSpt	nciSetpoints	unoccupied_cool	10 to 35°C (50 to 95°F)		28°C (82°F)

(continued)

Table A2. Configuration Points (Right).

User Address	Comments
AuxContactorMode	False—Installer parameter has a 0 state; True—Installer parameter has a 1 state. 0—Time-of-day; 1—Economizer.
BdTempOffset	Scaled in 0.5 degrees F.
CoolCycHr1	3, or 4 Cycles Per Hour for cooling stage 1.
CoolCycHr2	3, or 4 Cycles Per Hour for cooling stage 2.
CoolCycHr3	3, or 4 Cycles Per Hour for cooling stage 3.
DeadBand	2 to 10 degrees F.
DisplayDegC	Degree Temperature Display: 0 –Fahrenheit; 1–Celsius
Display24Hr	Clock Format: 0 = 12 hrs; 1 = 24 hrs
DlcBumpTemp	Specifies the amount of shift in the controlled space temperature when demand limit control (DlcShed) is active.
CoolOccSpt	NciSetpoints specify the scheduled space temperature setpoint for various operating modes and effective occupancy. Setpoints may be changed during day-to-day operation of the node by a networked operator interface. When the local schedule is active, nciSetpoints can also be changed from the front panel of the thermostat. The fields specify the setpoint temperature for heating and cooling modes and effective occupancy (Occ, Standby, or UnOcc).
CoolStbySpt	NciSetpoints specify the scheduled space temperature setpoint for various operating modes and effective occupancy. Setpoints can be changed during day-to-day operation of the node by a networked operator interface. When the local schedule is active, nciSetpoints can also be changed from the front panel of the thermostat. The fields specify the setpoint temperature for heating and cooling modes and effective occupancy (Occ, Standby, or UnOcc).
CoolUnoccSpt	NciSetpoints specify the scheduled space temperature setpoint for various operating modes and effective occupancy. Setpoints may be changed during day-to-day operation of the node by a networked operator interface. When the local schedule is active, nciSetpoints can also be changed from the front panel of the thermostat. The fields specify the setpoint temperature for heating and cooling modes and effective occupancy (Occ, Standby, or UnOcc).

(continued)

Table A2. Configuration Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
DuctTempEnable	nciConfig	DuctTempEnable	Off On	0 1	Off
EmHeatCycHr	nciConfig	EmHeatCph	9Cph 3Cph 4Cph 6Cph 8Cph	9 3 4 6 8	9Cph
FanKeyDisabled	nciConfig	FanKeyDisabled	Off On	0 1	Off
FanMode	nciConfig	FanMode	ContFanRecov AutoFan ContFan	2 0 1	ContiFanRe cov
FanOnHeat	nciConfig	FanOnHeat	Off On	0 1	Off
FanRunOnCool	nciConfig	FanRunonCool	Off On	0 1	On
FanRunOnHeat	nciConfig	FanRunonHeat	Off On	0 1	On
HeatCycHr1	nciConfig	HeatCph1	6Cph 8Cph 9Cph 3Cph 4Cph	6 8 9 3 4	6Cph
HeatCycHr2	nciConfig	HeatCph2	6Cph 8Cph 9Cph 3Cph 4Cph	6 8 9 3 4	6Cph
HeatCycHr3	nciConfig	HeatCph3	6Cph 8Cph 9Cph 3Cph 4Cph	6 8 9 3 4	6Cph
HeatOccSpt	nciSetpoints	occupied_heat	10° to 35°C (50° to 95°F)		21°C (70°F)
HeatStbySpt	nciSetpoints	standby_heat	10° to 35°C (50° to 95°F)		19°C (66°F)

(continued)

Table A2. Configuration Points (Right Continued).

User Address	Comments
DuctTempEnable	If the thermostat has duct temperature sensor capability and a duct sensor is connected, ductTempEnable is True and duct temperature is reported in StatusDuctTemp. If ductTempEnable is False, StatusDuctTemp is set to invalid. When DuctTempEnable is False, the DuctTempSenErr is suppressed.
EmHeatCycHr	3,4,6,8,9 Cycles Per Hour For the emergency heat stage(s).
FanKeyDisabled	False—Installer parameter has a 0 state; True—Installer parameter has a 1 state. Valid values are: 0—None; 1—Auto only.
FanMode	Specifies the operation of the fan. This network variable field sets the intelligent fan mode parameter in the T7300 (Installer Setup Parameter No. 17). Valid values are: AutoFan—Fan cycles on and off with demand for cooling and may cycle with heating if FanOnHeat is True. This is called intermittent operation. ContFan—Fan runs continuously when the effective occupancy is Occ or Bypass. When the effective occupancy is UnOcc, the fan cycles on and off with demand for cooling and may cycle with heating if FanOnHeat is True. ContFanRecov—Fan runs continuously when the effective occupancy is Occ or Bypass and when the T7300 is in Recovery mode. When effective occupancy is UnOcc (with no recovery in progress), the fan cycles on and off with demand for cooling and may cycle with heating if FanOnHeat is True.
FanOnHeat	FanOnHeat specifies the operation of the fan during Heat Mode. This network variable field sets the <i>Fan Option for Dual Fuel</i> parameter in the T7300 (Installer Setup Parameter No. 2). Allows choice of either the T7300 directly starting the fan, or the plenum temperature switch starting the fan. Typically, with gas or oil fuel, a plenum switch is used, and with electric heat, the T7300 controls the fan directly. Valid values are: True—Fan is on in Heat StatusMode. False—Fan is never turned on in the Heat StatusMode and a thermostat controlled switch that senses heated air temperature turns on the fan.
FanRunOnCool	FanRunOnCool sets the <i>Extend Fan for Cooling</i> parameter in the T7300 (Installer Setup Parameter No. 19). This parameter specifies whether or not the fan runs for a short time after the cooling stages have turned off. If FanRunOnCool is True, the fan is turned off 90 seconds after all cooling stages have turned off. If FanRunOnCool is False, the fan is turned off immediately when the last cooling stage is turned off.
FanRunOnHeat	Sets the <i>Extend Fan for Heating</i> parameter in the T7300 (Installer Setup Parameter No. 20). This parameter specifies whether the fan runs for a short time after all the heating stages have turned off. If FanRunOnHeat is True, the fan is turned off 90 seconds after the heating stages have turned off. If FanRunOnHeat is False, the fan is turned off immediately when the last cooling stage is turned off.
HeatCycHr1	3, 4, 6, 8, 9 Cycles Per Hour for heat stage 1.
HeatCycHr2	3, 4, 6, 8, 9 Cycles Per Hour for heat stage 2.
HeatCycHr3	3, 4, 6, 8, 9 Cycles Per Hour fFor heat stage 3.
HeatOccSpt	NciSetpoints specify the scheduled space temperature setpoint for various operating modes and effective occupancy. Setpoints may be changed during day-to-day operation of the node by a networked operator interface. When the local schedule is active, nciSetpoints can also be changed from the front panel of the thermostat. The fields specify the setpoint temperature for heating and cooling modes and effective occupancy (Occ, Standby, or UnOcc).
HeatStbySpt	NciSetpoints specify the scheduled space temperature setpoint for various operating modes and effective occupancy. Setpoints may be changed during day-to-day operation of the node by a networked operator interface. When the local schedule is active, nciSetpoints can also be changed from the front panel of the thermostat. The fields specify the setpoint temperature for heating and cooling modes and effective occupancy (Occ, Standby, or UnOcc).

(continued)

Table A2. Configuration Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
InterStgDeadBand	nciConfig	InterStgDeadBand	0 to 12		0
KeyBdLockOut	nciConfig	KeyBdLockOut	Normal Lock LockAll	0 1 2	Normal
LockOutInstaller	nciConfig	LockOutInstaller	Off On	0 1	Off
MinCompOffTime	nciConfig	MinCompOffTime	0 to 5		4
MinHeatOffTime	nciConfig	MinHeatOffTime	0 to 4		4
MinOnTime	nciConfig	MinOnTime	0 to 2		2
NoHeatCoolDsply	nciConfig	NoHeatCoolDsply	Off On	0 1	Off
NoTempDsply	nciConfig	NoTempDisplay	Off On	0 1	Off
MinCoolSetPt	nciLrSPCool		0 to 3		10
NodeObjSendT	nciNodeSendT		0 to 600		0
HeatUnoccSpt	nciSetpoints	unoccupied_heat	10° to 35°C (50° to 95°F)		16°C (61°F)
MaxHeatSetPt	nciUpSPHeat		0 to 1080		35

(continued)

Table A2. Configuration Points (Right Continued).

User Address	Comments
InterStgDeadBand	0 to 12 degrees F.
KeyBdLockOut	Normal—No keyboard keys are locked out. Lock—Lockout program keys. LockAll—Lockout the keyboard, except Time Set and Temporary Setpoint adjustments. Valid values are: 0—none; 1—lockout program keys; 2—lockout total keyboard, (except Time Set and Temporary Setpoint adjustments).
LockOutInstaller	False—Installer parameter has the 0 state. True—Installer parameter has the 1 state. Valid values are: 0—no lockout; 1—Lockout installer setup.
MinCompOffTime	0 to 5 minutes.
MinHeatOffTime	0 to 4 minutes.
MinOnTime	0 to 2 minutes.
NoHeatCoolDsply	False—Installer parameter has the 0 state. True—Installer parameter has the 1 state. Valid values are: 0—Display temperature; 1—Do not display temperature.
NoTempDsply	False—Installer parameter has the 0 state. True—Installer parameter has the 1 state. Valid values are: 0—Normal display; 1—Suppress display of Heat on and Cool on.
MinCoolSetPt	MaxHeatSetPt and MinCoolSetPt are the maximum allowed heating setpoint and minimum allowed cooling setpoint used by the thermostat (see installer setup features of thermostat). MaxHeatSetPt sets the <i>Temperature range stops in heating</i> parameter (Installer Setup Parameter No. 34) and MinCoolSetPt sets the <i>Temperature range stops in cooling</i> (Installer Setup Parameter No. 35) in the T7300. The thermostat limits the temporary heating setpoint to a maximum value of MaxHeatSetPt and limits the temporary cooling setpoint to a minimum of MinCoolSetPt. The subbase also uses MaxHeatSetPt and MinCoolSetPt to limit the range of setpoints.
NodeObjSendT	The maximum time between updates of network variable outputs (nvoStatus) from the node object is NodeObjSendT.
HeatUnoccSpt	NciSetpoints specify the scheduled space temperature setpoint for various operating modes and effective occupancy. Setpoints may be changed during day-to-day operation of the node by a networked operator interface. When the local schedule is active, nciSetpoints can also be changed from the front panel of the thermostat. The fields specify the setpoint temperature for heating and cooling modes and effective occupancy (Occ, Standby, or UnOcc).
MaxHeatSetPt	MaxHeatSetPt and MinCoolSetPt are the maximum allowed heating setpoint and the minimum allowed cooling setpoint used by the thermostat (see installer setup features of thermostat). MaxHeatSetPt sets the <i>Temperature range stops in heating</i> parameter (Installer Setup Parameter No. 34) and MinCoolSetPt sets the <i>Temperature range stops in cooling</i> (Installer Setup parameter No. 35) in the T7300. The thermostat limits the temporary heating setpoint to a maximum value of MaxHeatSetPt and limits the temporary cooling setpoint to a minimum of MinCoolSetPt. The subbase also uses MaxHeatSetPt and MinCoolSetPt to limit the range of setpoints.

(continued)

Table A2. Configuration Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
NrCoolStages	nciConfig	NrCoolStages	0		1
OBMode	nciConfig	OBMode	Off Off	0 1	On
OvrdPriority	nciConfig	OverridePriority	NetWins LastWins	1 0	NetWins
SensorCal	nciConfig	SensorOffsetCal	0 1 2 3 -1 -2 -3	0 1 2 3 4 5 6	0
SetFactDefault	nciConfig	SetFactDefault	Off On	0 1	Off
SystemSw	nciConfig	SystemSw	AutoManual ManualOnly AutoOnly	0 1 2	AutoManual
TempSensor	nciConfig	TempSensor	LocalSensor RemoteSensor Average Unused	0 1 2 15	LocalSensor
TODOffset	nciConfig	TODOffset	0 to 15		0
RcvHrtBt	nciRcvHrtBt		0 to 600		0
SndHrtBt	nciSndHrtBt		0 to 600		0

Table A2. Configuration Points (Right Continued).

User Address	Comments
NrCoolStages	0-3 stages for heat pump subbases; 0-2 stages for conventional subbases.
OBMode	False—Installer parameter has a 0 state. True—Installer parameter has a 1 state. Valid values are: 0—O on in Cool, B on in Heat; 1—B on in Cool, O on in Heat.
OvrdPriority	Configures the override arbitration between DestManOcc, DestBypass and the thermostat temporary occupied and continuous unoccupied buttons. Valid values are as follows: LastWins—Last command received from the thermostat occupancy buttons. DestBypass or DestManOcc determines the effective override state. NetWins—When DestManOcc is not Null, then the effective occupancy is DestManOcc regardless of DestBypass and the thermostat occupancy buttons.
SensorCal	Allows the thermostat sensor to be calibrated according to the following values: 0 = adds 0 to the sensed temperature. 1 = adds 1 degree F to sensed value. 2 = adds 2 degrees F to sensed value. 3 = adds 3 degrees F to sensed value. -1 = adds -1 degree F to sensed value. -2 = adds -2 degree F to sensed value. -3 = adds -3 degrees F to sensed value.
SetFactDefault	Restore the installer set up values to the factory default values. Valid values are: 0— Do not set factory default values; 1—Restore factory default values.
SystemSw	AutoManual—System switch choices are not restricted. ManualOnly—System switch choices do not allow an Auto position. AutoOnly—System switch has only an Auto position. Valid values are: 0—1; 1—no auto; 2—auto only.
TempSensor	Selects space temperature sensor to control room temperature using the following parameters: Local Sensor—The thermostat uses the local space temperature sensor to control the room temperature. RemoteSensor—The thermostat uses the remotely wired space temperature sensor to control the room temperature. Average—The thermostat uses the average of the local space temperature sensor and the remotely wired space temperature sensor to control the room temperature.
TODOffset	0-15 degrees F.
RcvHrtBt	The SGPUC and SGPU time (heartbeat time) between updates of network variable outputs as listed in the table of network variables is nciSndHrtBt. The failure detection time for network variable outputs as listed in the table of network variables is nciRcvHrtBt. NOTE: nciSndHrtBt should be set to 55 seconds and nciRcvHrtBt should be set to 300 seconds by a management node to be compatible with a Honeywell system.
SndHrtBt	The SGPUC and SGPU time (heartbeat time) between updates of network variable outputs as listed in the table of network variables is nciSndHrtBt. The failure detection time for network variables outputs as listed in the table of network variables is nciRcvHrtBt. NOTE: nciSndHrtBt should be set to 55 seconds and nciRcvHrtBt should be set to 300 seconds (by a management node) to be compatible with a Honeywell system.

Table A3. Status Points (Left).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
gStatusOvrD	nvoCtlDataG	OvrRide	Null Occ UnOcc Bypass Standby	-1 0 1 2 3	Null
gStatusRmTemp	nvoCtlDataG	SpaceTemp	-10° to 50°C (50° to 122°F)		Invalid
gStatusRmTmpActSpt	nvoCtlDataG	EffectSetPt	10° to 35°C (50° to 95°F)		Invalid
gStatusSysFanCmd	nvoCtlDataG	FanSelection	Null Off Low Med High On	-1 0 1 2 3 4	Null
gY1	nvoCtlDataG	FieldNo	0 to 255		NoField
StatusBypTimer	nvoData	uiBypassTimer	0 to 2880		0
StatusCmdMode	nvoData	CmdMode	Enable Remote Override ClearStatus ClearAlarm AlarmNotifyEnabled AlarmNotifyDisabled ManualControl RemoteControl Program Null Normal Disabled UpdateStatus SelfTest UpdateAlarm ReportMask Override	7 8 9 10 11 12 13 14 15 -1 0 1 2 3 4 5 6	Enable
StatusCoolStgsOn	nvoData	CoolStagesOn	0 to 2		0
InOverride	nvoStatus	in_override	False True	0 1	False
Status_Disabled	nvoStatus	disabled	False True	0 1	False

(continued)

Table A3. Status Points (Right).

User Address	Comments
gStatusOvr	All User Addresses starting with a <i>g</i> are identical in purpose to the UserAddresses of the same name but without the <i>g</i> . The <i>g</i> points exist for binding to other nodes (they use the Guaranteed Periodic Update mechanism), while the non- <i>g</i> points are used for polling from a monitoring tool or workstation.
gStatusRmTemp	
gStatusRmTmpActSpt	
gStatusSysFanCmd	
gY1	Indicates that other data fields in the SGPUC network variable have changed since the last time it was sent to the network according to the SGPUC mechanism. If gY1 is AllFields, then all fields have been updated. If gY1 is NoField, then no fields have been recently updated.
StatusBypTimer	<p>The time left in the bypass timer is StatusBypTimer minutes. If StatusBypTimer is zero, then the bypass timer is not running. The StatusBypTimer is started at BypTime under the following conditions:</p> <ul style="list-style-type: none"> • OvrPriority is NetWins, and DestManOcc changes from another state to Bypass. • OvrPriority is NetWins, and DestManOcc is Null, DestBypass in not on, and StatusLocalOvrRide changes from another state to Bypass. • OvrPriority is LastWins and DestManOcc changes from another state to Bypass. • OvrPriority is LastWins, DestBypass in not on, and StatusLocalOvrRide changes from another state to Bypass.
StatusCmdMode	<p>LonMark® defines an Object Request network variable input (see EVOBJECTRqst section) that has high-level override capability (for example, to enable or disable the node). Some of the EVOBJECTRqst states affect the operating StatusMode of the node. Since EVOBJECTRqst may be used for several objects and affects other aspects of the object, only the states that affect the operating StatusMode follow. The last pertinent EvObjectRqst state for this object is retained in StatusCmdMode until power fails or another state is received.</p> <p>Enable—Enables automatic control of outputs.</p> <p>Disabled—Disables the automatic control and turns off all outputs.</p>
StatusCoolStgsOn	Indicates the number of cooling stages currently energized.
InOverride	Not supported, set to zero.
Status_Disabled	When the control loop(s) are disabled and the outputs are set to Off, then this bit is set to one; otherwise this bit is set to zero.

(continued)

Table A3. Status Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
StatusDlcShed	nvoData	DlcShed	Off On	0 1	Off
StatusDuctTemp	nvoData	DuctTemp	0 to 50		Invalid
StatusEconOn	nvoData	EconOn	Off On	0 1	Off
StatusEmHtStgsOn	nvoData	EmHeatStagesOn	Off On	0 1	Off
StatusFan1On	nvoData	Fan1On	Off On	0 1	Off
StatusFan2On	nvoData	Fan2On	Off On	0 1	Off
StatusHeatStgsOn	nvoData	HeatStagesOn	0 to 2		0
StatusLocalOvrRide	nvoData	LocalOvrRide	Null Occ UnOcc Bypass Standby	-1 0 1 2 3	Null
StatusMode	nvoData	mode	StartUpWait Heat Cool EmergencyHeat Off FanOnly Manual Disable	0 1 2 3 4 5 6 7	StartUpWait
StatusOcc	nvoData	EffectOcc	Null Occ UnOcc Bypass Standby	-1 0 1 2 3	Null

(continued)

Table A3. Status Points (Right Continued).

User Address	Comments
StatusDlcShed	Indicates the current status of a network-initiated Demand Limit Control Shed/Restore signal.
StatusDuctTemp	If the thermostat has duct temperature measuring capability and a sensor is connected, ductTempEnable is True and duct temperature is reported in StatusDuctTemp. If there is no sensor, DuctTempEnable is False, or the sensor fails, then StatusDuctTemp is invalid.
StatusEconOn	Indicates the status of the Economizer output.
StatusEmHtStgsOn	Indicates the number of emergency heating stages currently energized.
StatusFan1On	Indicates the state of Fan stage 1.
StatusFan2On	Indicates the state of Fan stage 2.
StatusHeatStgsOn	Indicates the number of heating stages currently energized.
StatusLocalOvrRide	Temporary Occupied, Continuous Occupied and Run Program thermostat buttons can be used to change thermostat occupancy. StatusLocalOvrRide reports the current status of the local override state as: UnOcc — Continuous Unoccupied has been pressed last. User is requesting the UnOcc state. Bypass—Temporary Occupied has been pressed last. User is requesting the timed Bypass state. Null—One of the following has occurred: <ul style="list-style-type: none"> Power has recently been applied to the thermostat. Run Program button was pressed. StatusLocalOvrRide was UnOcc and the Continuous Unoccupied button was pressed again. StatusLocalOvrRide was Bypass and the Temporary Occupied button was pressed again. The user is requesting the schedule occupancy state.
StatusMode	Indicates the current StatusMode of the node determined by many inputs and arbitrated by control logic. Valid values are: StartUpWait—First StatusMode after application restart or power up. Heat—Mechanical heating is enabled. Mechanical cooling is disabled. Cool—Mechanical cooling is enabled. Mechanical heating is disabled. EmergencyHeat—In a heat pump application, the emergency heating stages are turned on to supply auxiliary heat. The compressor stage(s) are disabled. FanOnly—Fan is turned on and heating and cooling are disabled. Off—Off mode is triggered by DestHvacMode set to Off; same effects as Off mode; NodeDisableAlrm is initiated. Disabled—Disabled mode is triggered by StatusCmdMode set to DISABLED; same effects as Off mode; NodeDisableAlrm is initiated. Manual—Physical outputs are controlled from the T7300 panel in the installer mode.
StatusOcc	Effective occupancy arbitrated from DestManOcc, DestBypass, StatusLocalOvrRide and DestSchedOcc in remote schedule mode (or SrcSchedOcc0 in local schedule mode). StatusOcc is used to select the current temperature setpoint. Valid values are: Occ—Space considered to be occupied. Occupied setpoint controls space temperature. UnOcc—Space considered to be unoccupied. Unoccupied setpoint controls space temperature. Bypass—Space considered to be occupied even though not scheduled. Occupied setpoint controls space temperature. StatusOcc can be used for billing bypass time. A bypass timer either in this node or another node controls the length of time that the node is in the Bypass state.

(continued)

Table A3. Status Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
T7300CommFailed	nvoAlarmStatus	T7300CommFailed	False True AlarmNotifyDisabled	0 1 1	False
gStatusBypTimer	nvoCtlDataG	uiBypassTimer	0 to 2880		0
gStatusCmdMode	nvoCtlDataG	CmdMode	Enable RemoveOverride ClearStatus ClearAlarm AlarmNotifyEnabled AlarmNotifyDisabled ManualControl RemoteControl Program Null Normal Disabled UpdateStatus SelfTest UpdateAlarm ReportMask Override	7 8 9 10 11 12 13 14 15 -1 0 1 2 3 4 5 6	Enable
gStatusCoolStgsOn	nvoCtlDataG	CoolStagesOn	0 to 2		0
gStatusDlcShed	nvoCtlDataG	DlcShed	Off On	0 1	Off
gStatusDuctTemp	nvoCtlDataG	DuctTemp	0 to 50		Invalid
gStatusEconOn	nvoCtlDataG	EconOn	Off On	0 1	Off
StatusOvrD	nvoData	OvrRide	Null Occ UnOcc Bypass Standby	-1 0 1 2 3	Null
StatusRmTemp	nvoData	SpaceTemp	-10° to 50°C (50° to 122°F)		Invalid
StatusRmTmpActSpt	nvoData	EffectSetPt	10° to 35°C (50° to 95°F)		Invalid
StatusSysFanCmd	nvoData	FanSelection	Null Off Low Med High On	-1 0 1 2 3 4	Null

(continued)

Table A3. Status Points (Right Continued).

User Address	Comments
T7300CommFailed	Communications between the T7300 Thermostat and the Q7300 subbase has failed.
gStatusBypTimer	All User Addresses starting with a <i>g</i> are identical in purpose to the UserAddresses of the same name but without the <i>g</i> . The <i>g</i> points exist for binding to other nodes (they use the Guaranteed Periodic Update mechanism), while the non- <i>g</i> points are used for polling from a monitoring tool or workstation.
gStatusCmdMode	
gStatusCoolStgsOn	
gStatusDlcShed	
gStatusDuctTemp	
gStatusEconOn	
StatusOvrD	Effective manual override state arbitrated from OverridePriority, DestManOcc, DestBypass, StatusLocalOvrRide and StatusBypTimer. Valid values are: Occ—Effective manual override is occupied. UnOcc—Effective manual override is not occupied. Bypass—Bypass Timer is running in this node or another node and effective manual override is occupied. Standby—Effective manual override is Standby. Null—No manual override of the schedule occupancy.
StatusRmTemp	StatusRmTemp is the room temperature used to control the temperature of the room. If DestRmTemp is invalid, then the local and/or remote sensor (as selected by TempSensor) is reported in StatusRmTemp and SrcRmTemp. If DestRmTemp is not invalid, then DestRmTemp is reported in StatusRmTemp and SrcRmTemp. If DestRmTemp is invalid and the local and/or remote sensor (as selected by TempSensor) is also invalid (because of sensor failure), then StatusRmTemp and SrcRmTemp are also invalid and room temperature can no longer be controlled by this node.
StatusRmTmpActSpt	Current temperature control point (i.e. the current actual space temperature setpoint that the node is trying to maintain in the conditioned space) is reported in StatusRmTmpActSpt and SrcRmTempActSpt. SrcRmTempActSpt is updated from StatusRmTmpActSpt according to the SGPU mechanism where a significant change is plus or minus 0.07 degrees C.
StatusSysFanCmd	Indicates the status of the thermostat fan switch. On—Fan switch is in the On position. Off—Fan switch is in the Auto position.

(continued)

Table A3. Status Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
gStatusEmHtStgsOn	nvoCtlDataG	EmHeatStagesOn	0		0
gStatusFan1On	nvoCtlDataG	Fan1On	Off On	0 1	Off
gStatusFan2On	nvoCtlDataG	Fan2On	Off On	0 1	Off
gStatusHeatStgsOn	nvoCtlDataG	HeatStagesOn	0 to 2		0
gStatusLocalOvrRide	nvoCtlDataG	LocalOvrRide	Null Occ UnOcc Bypass Standby	-1 0 1 2 3	Null
gStatusMode	nvoCtlDataG	mode	Off FanOnly Manual Disable StartUpWait Heat Cool EmergencyHeat	4 5 6 7 0 1 2 3	Off
gStatusOcc	nvoCtlDataG	EffectOcc	Null Occ UnOcc Bypass Standby	-1 0 1 2 3	Null

Table A3. Status Points (Right Continued).

User Address	Comments
gStatusEmHtStgsOn	All User Addresses starting with a <i>g</i> are identical in purpose to the UserAddresses of the same name but without the <i>g</i> . The <i>g</i> points exist for binding to other nodes (they use the Guaranteed Periodic Update mechanism), while the non- <i>g</i> points are used for polling from a monitoring tool or workstation.
gStatusFan1On	
gStatusFan2On	
gStatusHeatStgsOn	
gStatusLocalOvrRide	
gStatusMode	
gStatusOcc	

Table A4. Alarm Points (Left).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
AlarmNode	nvoAlarm	node	0 to 127		0
AlarmSubnet	nvoAlarm	subnet	1 to 255		0
AlarmLog1	nvoAlarmLog	AlarmLog1	False True AlarmNotifyDisabled	0 1 1	NoAlarm
AlarmLog2	nvoAlarmLog	AlarmLog2	False True AlarmNotifyDisabled	0 1 1	NoAlarm
AlarmLog3	nvoAlarmLog	AlarmLog3	False True AlarmNotifyDisabled	0 1 1	NoAlarm
AlarmLog4	nvoAlarmLog	AlarmLog4	False True AlarmNotifyDisabled	0 1 1	NoAlarm
AlarmLog5	nvoAlarmLog	AlarmLog5	False True AlarmNotifyDisabled	0 1 1	NoAlarm
AlarmNotifyDisable	nvoStatus	alarm_notify_disabled	False True	0 1	False

(continued)

Table A4. Alarm Points (Right).

User Address	Comments
AlarmNode	The LonWorks® node number (in domain entry 1 of the nodes domain table).
AlarmSubnet	The LonWorks® subnet number (in domain entry 1 of the node's domain table).
AlarmLog1	The last five alarm reports sent via nvoAlarm are reported via nvoAlarmLog. When AlarmNotifyDisabled is entered into the log, further alarms or return to normal are not entered into the log until alarm reporting is again enabled. If nvoAlarm is bound and not acknowledged, the last alarm report entered into nvoAlarmLog is the one that was not acknowledged. AlarmLog1 is the newest alarm and AlarmLog5 is the oldest. When a new entry is made to the log, the oldest entry is lost.
AlarmLog2	The last five alarm reports sent via nvoAlarm are reported via nvoAlarmLog. When AlarmNotifyDisabled is entered into the log, further alarms or return to normal are not entered into the log until alarm reporting is again enabled. If nvoAlarm is bound and not acknowledged, the last alarm report entered into nvoAlarmLog is the one that was not acknowledged. AlarmLog1 is the newest alarm and AlarmLog5 is the oldest. When a new entry is made to the log, the oldest entry is lost.
AlarmLog3	The last five alarm reports sent via nvoAlarm are reported via nvoAlarmLog. When AlarmNotifyDisabled is entered into the log, further alarms or return to normal are not entered into the log until alarm reporting is again enabled. If nvoAlarm is bound and not acknowledged, the last alarm report entered into nvoAlarmLog is the one that was not acknowledged. AlarmLog1 is the newest alarm and AlarmLog5 is the oldest. When a new entry is made to the log, the oldest entry is lost.
AlarmLog4	The last five alarm reports sent via nvoAlarm are reported via nvoAlarmLog. When AlarmNotifyDisabled is entered into the log, further alarms or return to normal are not entered into the log until alarm reporting is again enabled. If nvoAlarm is bound and not acknowledged, the last alarm report entered into nvoAlarmLog is the one that was not acknowledged. AlarmLog1 is the newest alarm and AlarmLog5 is the oldest. When a new entry is made to the log, the oldest entry is lost.
AlarmLog5	The last five alarm reports sent via nvoAlarm are reported via nvoAlarmLog. When AlarmNotifyDisabled is entered into the log, further alarms or return to normal are not entered into the log until alarm reporting is again enabled. If nvoAlarm is bound and not acknowledged, the last alarm report entered into nvoAlarmLog is the one that was not acknowledged. AlarmLog1 is the newest alarm and AlarmLog5 is the oldest. When a new entry is made to the log, the oldest entry is lost.
AlarmNotifyDisable	When alarm reporting is suppressed, this bit is set to one indicating that alarm reporting is disabled. If this bit is zero, alarm reporting is enabled.

(continued)

Table A4. Alarm Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
AlarmType	nvoAlarm	type	NoAlarm InvalidSetPtAlrm T7300CommFailed SensorFail Alrm NodeDisableAlrm CommFailAlrm PgmVerAlrm InvalidSetPtRtnN NodeDisableRtnN SensorFailRtnN NodeDisableRtnN CommFailRtnN PgmVerAlrmRtnN AlarmNotifyDisabled	0 1 2 3 4 5 6 -127 -126 -125 -124 -123 -122 -1	NoAlarm
CommFailAlrm	nvoAlarmStatus	CommFailAlrm	False True AlarmNotifyDisabled	0 1 1	False
PgmVerAlrm	nvoAlarmStatus	PgmVerAlrm	False True AlarmNotifyDisabled	0 1 1	False
DestApplicModeErr	nvoError	nviApplicModeErr	Off On	0 1	Off
DestBypassErr	nvoError	nviBypassErr	Off On	0 1	Off
DestDlcShedErr	nvoError	nviDlcShedErr	Off On	0 1	Off
DestOccSchedErr	nvoError	nviOccSchedErr	Off On	0 1	Off
DestSpaceTempErr	nvoError	nviSpaceTempErr	Off On	0 1	Off
RemoteTempSenErr	nvoError	RemoteTempSenErr	Off On	0 1	Off

(continued)

Table A4. Alarm Points (Right Continued).

User Address	Comments
AlarmType	The actual alarm being issued. When an alarm condition is no longer True, AlarmType is set to the sum of the numeric value of the alarm condition and 128. The alarm type is also recorded in nvoAlarmLog.
CommFailAlrm	One or more bound network variable inputs have failed to receive an update within the specified FAILURE_DETECT_TIME.
PgmVerAlrm	PgmVerCode of the thermostat is not compatible with this subbase software version. Further communications with the thermostat are not allowed.
DestApplicModeErr	A bound network variable has not been received for at least the failure detect time and the default has been set to the default value.
DestBypassErr	A bound network variable has not been received for at least the failure detect time and the default has been set to the default value.
DestDlcShedErr	A bound network variable has not been received for at least the failure detect time and the default has been set to the default value.
DestOccSchedErr	A bound network variable has not been received for at least the failure detect time and the default has been set to the default value.
DestSpaceTempErr	NviSpace Temp is bound and has not been received for at least the failure detect time and the nviSpaceTemp has been set to the default value. If there is no local space sensor, heating and cooling are turned off, but the fan remains under normal control.
RemoteTempSenErr	Uses default occupied setpoints.

(continued)

Table A4. Alarm Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
InvalidSetPtAlrm	nvoAlarmStatus	InvalidSetPtAlrm	False True AlarmNotifyDisabled	0 1 1	False
NodeDisableAlrm	nvoAlarmStatus	NodeDisableAlrm	False True AlarmNotifyDisabled	0 1 1	False
DestBypassErr	nvoError	nviBypassErr	Off On	0 1	Off
DestSetPtOffsetErr	nvoError	nviSetPointOffsetErr	Off On	0 1	Off
DestTimeErr	nvoError	nviTimeErr	Off On	0 1	Off
DuctTempSenErr	nvoError	DuctTempSenErr	Off On	0 1	Off
InAlarm	nvoStatus	in_alarm	False True	0 1	False
Mechanical Fault	nvoStatus	mechanical_fault	False True	0 1	False

(continued)

Table A4. Alarm Points (Right Continued).

User Address	Comments
InvalidSetPtAlrm	One of the space temperature points in nciSetpoints is not in the valid range. The node automatically corrects invalid values of nciSetpoints to a valid nciSetpoints value within 5 to 60 seconds. InvalidSetPtAlrm is a temporary alarm that automatically returns to normal.
NodeDisableAlrm	Control algorithm has stopped because the controller is in Disabled or Manual StatusMode. No more alarms are reported via nvoAlarm and nvoAlarmLog when StatusMode is Disabled and the last alarm issued is NodeDisableAlrm.
DestBypassErr	A bound network variable has not been received for at least the failure detect time and the default has been set to the default value.
DestSetPtOffsetErr	A bound network variable has not been received for at least the failure detect time and the default has been set to the default value.
DestTimeErr	A bound network variable has not been received for at least the failure detect time and the default has been set to the default value.
DuctTempSenErr	No action.
InAlarm	If alarm reporting is not suppressed and alarms are currently active, then InAlarm is set to True, otherwise InAlarm is set to False.
MechanicalFault	Not supported, set to zero.

(continued)

Table A4. Alarm Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
SensorFailAlrm	nvoAlarmStatus	SensorFailAlrm	False True AlarmNotifyDisabled	0 1 1	False
SpaceTempSenErr	nvoError	SpaceTempSenErr	Off On	0 1	Off
UnitAlarm	nvoUnitStatus	in_alarm	False True	0 1	False

Table A4. Alarm Points (Right Continued).

User Address	Comments
SensorFailAlarm	One or more sensors have failed in the thermostat.
SpaceTempSenErr	Heating and cooling turned off. Fan remains under normal control.
UnitAlarm	UnitAlarm reports the object alarm condition. Valid values are: False—No alarm reported by nvoAlarmStatus. True—At least one alarm reported by nvoAlarmStatus. AlarmNotifyDisabled—Alarm reporting has been suppressed.

Table A5. Shared Points (Left).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
DestBypass	nviBypass		0 to 100	0	
sDestBypass	nviBypass	state	Null Off On	-1 0 1	-1
DestDlcShed	nviDlcShed		No Minimum	0 1	No
DestFan	nviFanOnAuto	value	0 to 100		0
sDestFan	nviFanOnAuto	state	Null Off On	-1 0 1	Null
DestRmTempSpt	NviSetPoint		10° to 35°C (50° to 95°F)		Invalid
DestRmTemp	nviSpaceTemp		-10 to 50C (14° to 122°F)		Invalid
DestDate	nviTime	day	1 to 31		

(continued)

Table A5. Shared Points (Right).

User Address	Comments
DestBypass	<p>Bypass state of one node may be shared with bypass state of another node using DestBypass and SrcBypass. This allows a wall module at one node to be used to override the scheduled occupancy of another node. The node with DestBypass bound normally does not have a wall module. See the StatusOcc and StatusOvrd for more details. When a bypass signal is received via DestBypass, the bypass timer is not used. It is assumed that the duration of the bypass period is managed at the DestBypass source node. Valid states are as follows:</p> <p>On—The node should bypass the time-of-day schedule (subject to occupancy arbitration logic).</p> <p>Null—The input is not available because if it is not bound, the input is no longer being updated by the sender, or Bypass is no longer called. This is the same as Off.</p> <p>Off or Undefined—The node should not bypass the time-of-day schedule.</p> <p>On—The node should not bypass the time-of-day schedule. If the node receives this combination of state and value, then state is set to Off.</p>
sDestBypass	<p>Bypass state of one node can be shared with bypass state of another node using DestBypass and SrcBypass. This allows a wall module at one node to be used to override the scheduled occupancy of another node. The node with DestBypass bound normally does not have a wall module. See the StatusOcc and StatusOvrd for more details. When a bypass signal is received via DestBypass, the bypass timer is not used. It is assumed that the duration of the bypass period is managed at the DestBypass source node. Valid states are as follows:</p> <p>On—The node should bypass the time-of-day schedule (subject to occupancy arbitration logic).</p> <p>Null—The input is not available because if it is not bound, the input is no longer being updated by the sender, or Bypass is no longer called. This is the same as Off.</p> <p>Off or Undefined—The node should not bypass the time-of-day schedule.</p> <p>On—The node should not bypass the time-of-day schedule. If the node receives this combination of state and value, then state is set to Off.</p>
DestDlcShed	Input from an energy management system that monitors the building energy consumption. Controls the space temperature to save energy when the total building demand is approaching a limiting threshold.
DestFan	<p>DestFan and the thermostat front panel fan switch control the operation of the fan. The last item updated (DestFan or thermostat front panel fan switch) determines the fan operation. The fan may be in Auto mode defined by FanMode or may be continuously on.</p> <p>Allowable states:</p> <p>ON—If the thermostat allows Auto mode, the fan operates according to the FanMode selection. If the thermostat does not allow Auto mode, the fan runs continuously.</p> <p>OFF—If the thermostat allows On mode, the fan is continuously on. If the fan does not allow Continuously On, then the fan operates according to the FanMode selection.</p> <p>NULL—DestFan does not affect the fan operating mode of the thermostat.</p> <p>NOTE: When StatusMode is Off, Disabled, FanOnly, or Manual, DestFan has no effect.</p>
sDestFan	DestFan and the thermostat front panel fan switch control the operation of the fan. The last item updated (DestFan or thermostat front panel fan switch) determines the fan operation. The fan can be in Auto mode defined by FanMode or continuously On.
DestRmTempSpt	Input network variable that can be used to determine the temperature control point. If DestRmTempSpt is invalid, then this step is skipped.
DestRmTemp	Room temperature provided by a sensor on the network.
DestDate	<p>DestYear, DestMonth, DestDate are the date input values.</p> <p>If DestYear is 0xFFFF and DestMonth is 0xFF, then DestDate is the day of week as shown below: 0 = Sunday; 1 = Monday; 2 = Tuesday; 3 = Wednesday; 4 = Thursday; 5 = Friday; 6 = Saturday.</p> <p>If DestYear is not 0xFFFF and DestMonth is not 0xFF, then DestDate is the day of month. The node uses DestYear, DestMonth, and DestDate to calculate the day of week using a perpetual calendar. The thermostat's internal time clock only keeps track of day of week.</p>

(continued)

Table A5. Shared Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
DestHvacMode	nviApplicMode		Auto Heat MorningWarmUp Cool NightPurge PreCool Off Test EmergencyHeat FanOnly Null	0 1 2 3 4 5 6 7 8 9 -1	0
DestManOcc	nviOccCmd		Null Occ UnOcc Bypass Standby	-1 0 1 2 3	-1
DestSptOffset	nviSetPtOffset		-10° to 10°C (14° to 50°F)		Invalid
DestHour	nviTime	hour	0 to 23		
DestMinute	nviTime	minute	0 to 59		
DestMonth	nviTime	month	1 to 12		
DestYear	nviTime		0 to 65353		Invalid
DestSecond	nviTime		0 to 59		Invalid

(continued)

Table A5. Shared Points (Right Continued).

User Address	Comments
DestHvacMode	<p>DestHvacMode is an input that coordinates this controller with any other supervisory controllers or operator interface. The thermostat limits the allowed options. If DestHvacMode is set to a value that is not allowed by this thermostat, no action is taken until DestHvacMode is changed to a value that is allowed. Enumerated values have the following meanings:</p> <p>OFF—Shut off all outputs, and stop automatic temperature control.</p> <p>AUTO—The T7300 is allowed to automatically select either Heat or Cool mode using the space temperature and operating setpoint. This mode (in the thermostat) is reflected in the subbase StatusMode field.</p> <p>COOL—The Q7300 forces the thermostat System Switch to Cool mode. Heating is disabled. StatusMode = COOL.</p> <p>HEAT—The Q7300 forces the thermostat's software System Switch to Heat mode. Cooling is disabled. StatusMode = HEAT.</p> <p>EMERG HEAT —The Q7300 forces the thermostat's software System Switch to EmergencyHeat mode (for heat pump thermostats). Compressors are disabled, and the Auxiliary Heat stage is energized. StatusMode = EmergencyHeat.</p> <p>FAN ONLY—The fan is turned on and heating and cooling are disabled.</p>
DestManOcc	Input from a network connected operator interface or other node that indicates the state of a manual occupancy control thus overriding the scheduled occupancy state. DestManOcc is used along with other occupancy inputs to calculate the effective occupancy of the node.
DestSptOffset	Operator terminal or energy management system input used to shift the effective temperature setpoint by adding DestSptOffset to the calculated setpoint. If the value is outside the allowed range specified in the appendix, then the node uses the value of the nearest range limit. DestSptOffset is ignored if SttusOcc is UnOcc.
DestHour	DestHour, DestMinute, DestSecond is time-of-day in 24 hr format.
DestMinute	DestHour, DestMinute, DestSecond is time of day in 24 hr format.
DestMonth	See DestDate.
DestYear	See DestDate.
DestSecond	DestHour, DestMinute, DestSecond is time of day in 24 hr format.

(continued)

Table A5. Shared Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
DestTodEventNext					
DestSchedOcc	nviOccSchedule	CurrentState			Null
DestTuncos	nviOccSchedule	UiTimeToNextState	0 to 6553.4		0
DestRmTempSpt	nviSetPoint		10° to 35°C (50° to 95°F)		Invalid
DestRmTemp	nviSpaceTemp				Invalid
SrcBypass	nvoBypass	value	0 to 100		0
sSrcBypass	nvoBypass	state	Null Off On	-1 0 1	Null
SrcCoolOutput	nvoCoolOutput		0 to 100 percent		0

(continued)

Table A5. Shared Points (Right Continued).

User Address	Comments
DestTodEventNext	Command input from an energy management system that specifies the occupancy state of the zone is DestTodEventNext in DestTuncos (minutes). Valid values are: Occ, Standby—Space is scheduled to be occupied in DestTuncos (minutes). Unocc—Space is scheduled to be unoccupied in DestTuncos (minutes). Null, unspecified inputs—DestTodEvent is invalid or unused.
DestSchedOcc	Command input from an energy management system that specifies the current occupancy state of the zone. Valid values are: Occ, Standby—Space is scheduled to be occupied. UnOcc—Space is scheduled to be in unoccupied. Null and unspecified inputs—DestSchedOcc is invalid or unused.
DestTuncos	Command input from an energy management system that specifies the occupancy state of the zone is DestTodEventNext in DestTuncos (minutes). Valid values are: Occ, Standby—Space is scheduled to be occupied in DestTuncos (minutes). Unocc—Space is scheduled to be unoccupied in DestTuncos (minutes). Null, unspecified inputs—DestTodEvent is invalid or unused.
DestRmTempSpt	DestRmTempSpt is an input network variable that may be used as the center-setpoint in calculating the actual temperature control point. If DestRmTempSpt is valid, then OccHeat and OccCool are calculated using the following formula: $\text{OccHeat} = \text{DestRmTempSpt} - (\text{CoolOccSpt} - \text{HeatOccSpt}) / 2.$ $\text{OccCool} = \text{DestRmTempSpt} + (\text{CoolOccSpt} - \text{HeatOccSpt}) / 2.$
DestRmTemp	DestRmTemp is the room temperature provided by a sensor on the network.
SrcBypass	Indicates to other nodes that a timed bypass function has occurred. nvoBypass is related to StatusOcc as follows: Off—StatusOcc is not Bypass. On—StatusOcc is Bypass.
sSrcBypass	Indicates to other nodes that a timed bypass function has occurred. nvoBypass is related to StatusOcc as follows: Off—StatusOcc is not Bypass. On—StatusOcc is Bypass.
SrcCoolOutput	Outputs the current status of the mechanical cooling outputs. Output is a percentage of the maximum cooling capacity. For example, if one stage is energized and two stages are configured, the output will be 50%.

(continued)

Table A5. Shared Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
SrcEffectOcc	nvoEffectOcc		Null Occ	-1 0	Null
SrcHeatOutput	nvoHeatOutput		0 to 100 percent		0
SrcFan	nvoTerminalFan	state	Null Off On	-1 0 1	-1
SrcFanV	nvoTerminalFan	value	0 to 100 percent		0
SrcDate	nvoTime	day	0 to 6		Invalid
SrcHour	nvoTime	hour	0 to 23		Invalid
SrcMinute	nvoTime	minute	0 to 59		Invalid
SrcMonth	nvoTime	month	1 to 12		Invalid

(continued)

Table A5. Shared Points (Right Continued).

User Address	Comments
SrcEffectOcc	SrcEffectOcc is the effective occupancy arbitrated from DestManOcc, DestBypass, StatusLocalOvrRide and DestSchedOcc in remote schedule mode (or SrcSchedOcc0 in local schedule mode). SrcEffectOcc is used to send the occupancy state of the node to another LonWorks® Bus node to be slaved off of from the state of this node.
SrcHeatOutput	Outputs the current status of the mechanical heating outputs. Output is a percentage of the maximum heating capacity. For example, if one stage is energized and two stages are configured, the output will be 50%.
SrcFan	Indicates whether a fan is turned on. If either Fan1 or Fan2 outputs are turned on, then SrcFan indicates that a fan is turned on. If both Fan1 and Fan2 outputs are off, then SrcFan indicates that the fans are turned off. This output can be used to control a remote fan actuator.
SrcFanV	SNVT_Switch value field corresponding to SrcFan, which is the state field.
SrcDate	Day of week as listed: Sunday—0; Monday—1; Tuesday—2; Wednesday—3; Thursday—4; Friday—5; Saturday—6.
SrcHour	Time-of-day in 24-hr format.
SrcMinute	Time-of-day in 24-hr format.
SrcMonth	Always 0xFFFF to indicate that this node is not capable of sending the full time-of-day information.

(continued)

Table A5. Shared Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
SrcRmTempActSpt	nvoEffectSetpt		10° to 35°C (50° to 95°F)		
SrcSchedOcc0	nvoOccSchedule0	CurrentState	Occ UnOcc Bypass Standby Null	0 1 2 3 -1	
SrcSchedOcc1	nvoOccSchedule1	CurrentState	Occ UnOcc Bypass Standby Null	0 1 2 3 -1	Occ
SrcSchedOcc2	nvoOccSchedule2	CurrentState	Occ UnOcc Bypass Standby Null	0 1 2 3 -1	Occ
SrcSchedOcc3	nvoOccSchedule3	CurrentState	Occ UnOcc Bypass Standby Null	0 1 2 3 -1	Occ
SrcRmTempSpt	nvoSetPoint		10° to 35°C (50° to 95°F)		Invalid
SrcRmTemp	nvoSpaceTemp		-10° to 50°C (14 °to 122°F)		
SrcSecond	nvoTime	second	0 to 59		Invalid

(continued)

Table A5. Shared Points (Right Continued).

User Address	Comments
SrcRmTempActSpt	Current temperature control point (i.e. the current actual space temperature setpoint that the node is trying to maintain in the conditioned space) is reported in StatusRmTmpActSpt and SrcRmTempActSpt. SrcRmTempActSpt is updated from StatusRmTmpActSpt according to the SGPU mechanism where a significant change is plus or minus 0.07 degrees C.
SrcSchedOcc0	SrcSchedOcc0 is the effective occupancy arbitrated from the internal schedule of the T7300 (in local schedule mode). SrcSchedOcc0 is used to control the occupancy of other LonWorks® Bus devices.
SrcSchedOcc1	Same as SrcSchedOcc0.
SrcSchedOcc2	Same as SrcSchedOcc0.
SrcSchedOcc3	Same as SrcSchedOcc0.
SrcRmTempSpt	Can be bound to DestRmTempSpt in another node to affect the temperature setpoint of another node.
SrcRmTemp	SrcRmTemp is the room temperature used to control the temperature of the room. If DestRmTemp is Invalid, then the local and/or remote sensor (as selected by TempSensor) is reported in StatusRmTemp and SrcRmTemp. If DestRmTemp is not invalid, then DestRmTemp is reported in StatusRmTemp and SrcRmTemp. If DestRmTemp is invalid and the local and/or remote sensor (as selected by TempSensor) is also invalid (because of sensor failure), then StatusRmTemp and SrcRmTemp are also invalid and room temperature can no longer be controlled by this node.
SrcSecond	Time-of-day in 24-hr format.

(continued)

Table A5. Shared Points (Left Continued).

User Address	NvName	Field Name	Engineering Units: English (Metric) or Status plus range	Digital State or Value of State	Default
SrcTodEventNext0	nvoOccSchedule0	NextState	Occ UnOcc Bypass Standby Null	0 1 2 3 -1	
SrcTuncos0	nvoOccSchedule0	uiTimeToNextState	0 to 6553.4		0
SrcTodEventNext1	nvoOccSchedule1	NextState	Occ UnOcc Bypass Standby Null	0 1 2 3 -1	Occ
SrcTuncos1	nvoOccSchedule1	uiTimeToNextState	Occ UnOcc Bypass Standby Null	0 1 2 3 -1	0
SrcTodEventNext2	nvoOccSchedule2	NextState	Occ UnOcc Bypass Standby Null	0 1 2 3 -1	Occ
SrcTuncos2	nvoOccSchedule2	uiTimeToNextState	0 to 6553.4		0
SrcTodEventNext3	nvoOccSchedule3	NextState	Occ UnOcc Bypass Standby Null	0 1 2 3 -1	Occ
SrcTuncos3	nvoOccSchedule3	uiTimeToNextState	0 to 6553.4		0
SrcYear	nvoTime	year	0 65353		Invalid

Table A5. Shared Points (Right).

User Address	Comments
SrcTodEventNext0	This is the next occupancy state according to the internal schedule of the T7300 (in local schedule mode).
SrcTuncos0	<p>This is the <i>Time Until Next Change-of-State</i> of the occupancy mode.</p> <p>When the node is in local schedule mode, the scheduled occupancy is shared with up to four other nodes via network variables nvoOccSchedule0, nvoOccSchedule1, nvoOccSchedule2, and nvoOccSchedule3. In a Honeywell LonWorks® Bus environment, each of these network variables may be bound to one other controller so that a user interface may use the schedule assignment file to identify the nodes controlled by this schedule. In a third party environment, each of these network variables may be bound to more than one node.</p> <p>In local schedule mode, all four of these network variables are controlled by the thermostat schedule. The three fields of each network variable have the value or state as determined by the thermostat schedule. The fields for one of these network variables follows. The other three network variables are identical.</p> <p>In remote schedule mode, the node no longer sends the nvoOccScheduleX network variables on the network. If the node transitions from local to remote schedule mode, the values in nvoOccScheduleX are not changed from the previous value.</p> <p>SrcSchedOcc0 is the current scheduled occupancy state and SrcTodEventNext0 is the next scheduled occupancy state. The next state occurs in SrcTuncos0 minutes. The only occupancy states supported by this product are:</p> <ul style="list-style-type: none"> Occ—Space is occupied or is scheduled to be occupied in the future. UnOcc—Space is not occupied or is scheduled to be unoccupied in the future. Null—There is currently no local schedule programmed.
SrcTodEventNext1	This is the next occupancy state according to the internal schedule of the T7300 (in local schedule mode).
SrcTuncos1	This is the <i>Time Until Next Change-of-State</i> of the occupancy mode.
SrcTodEventNext2	This is the next occupancy state according to the internal schedule of the T7300 (in local schedule mode).
SrcTuncos2	This is the <i>Time Until Next Change-of-State</i> of the occupancy mode.
SrcTodEventNext3	This is the next occupancy state according to the internal schedule of the T7300 (in local schedule mode).
SrcTuncos3	This is the <i>Time Until Next Change-of-State</i> of the occupancy mode.
SrcYear	Always 0xFFFF to indicate that this node is not capable of sending the full time-of-day information.

NOTE: For additional information, refer to the Echelon® LonMark® Application Layer Interoperability Guidelines, Version 3.0, (available from LonMark® at internet address: www.lonmark.org.) and the SNVT Master List and Programmer's Guide.

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