AURORA

HydroLink

LON Points List For NXW/SKW

Aurora HydroLink LON Points List For NXW/SKW

LON Points for HydroLink for NXW/SKW

Software Version 1.03 Utilizing the Aurora HydroLink Controller

WaterFurnace® Commercial Solutions

							State Text	
Element Type	**NV Name**	**Reference Name**	**Direction**	**Default Value**	**Units**	**Description**	**Inactive = 0**	**Active = 1**
temp	nvoActivTempSpt	ActiveTempSetpt_st	Output_Active	- -	F	Currently active setpoint value for control logic		
temp	nvoControlTemp	ControlTemp_st	Output_Active	- -	F	Currently selected temperature value for setpoint control		
temp	nvoAXBAHtWtrTmp	AXBA_HotWaterTemp_st	Output_Active	- -	F	HWT temperature input on AXB-A. This input can be used by the field as needed.		
ampAc	nvoCmpAT1Amps	CompACurrentT1_st	Output_Active	- -	A	Compressor A T1 current		
ampAc	nvoCmpAT2Amps	CompACurrentT2_st	Output_Active	- -	A	Compressor A T2 current		
press	nvoCmpADisPress	CompADischPressure_st	Output_Active	- -	psi	Compressor A discharge pressure		
press	nvoCmpASctPress	CompASuctPressure_st	Output_Active	- -	psi	Compressor A suction pressure		
flow	nvoSrcWaterFlow	SourceWaterFlow_st	Output_Active	- -	gpm	Source heat exchanger water flow rate		
temp	nvoSrcLvgWtrTmp	SrcLvgWaterTemp_st	Output_Active	- -	F	Source heat exchanger leaving water temperature		
temp	nvoSrcEntWtrTmp	SrcEntWaterTemp_st	Output_Active	- -	F	Source heat exchanger entering water temperature		
temp	nvoAXBALvgArTmp	AXBA_LvgAirTempInput_st	Output_Active	- -	F	Lvg Air temperature input on AXB-A. This input can be used by the field as needed.		
temp	nvoCmpASctTmp	CompASuctLineTemp_st	Output_Active	- -	F	Compressor A suction line temperature		
temp	nvoRmtTmpInput	RemoteTempInput_st	Output_Active	- -	F	HWT temperature input on AXB-B. This input is used for remote temperature control on some configurations		
ampAc	nvoCmpBT1Amps	CompBCurrentT1_st	Output_Active	- -	A	Compressor B T1 current		
ampAc	nvoCmpBT2Amps	CompBCurrentT2_st	Output_Active	- -	A	Compressor B T2 current		
press	nvoCmpBDisPress	CompBDischPressure_st	Output_Active	- -	psi	Compressor B discharge pressure		
press	nvoCmpBSctPress	CompBSuctPressure_st	Output_Active	- -	psi	Compressor B suction pressure		
flow	nvoLdWaterFlow	LoadWaterFlow_st	Output_Active	- -	gpm	Load heat exchanger water flow rate		
temp	nvoLdLvgWtrTmp	LoadLvgWaterTemp_st	Output_Active	- -	F	Load heat exchanger leaving water temperature		
temp	nvoLdEntWtrTmp	LoadEntWaterTemp_st	Output_Active	- -	F	Load heat exchanger entering water temperature		
temp	nvoAXBBLvgArTmp	AXBB_LvgAirTemp_st	Output_Active	- -	F	Lvg Air temperature input on AXB-B. This input can be used by the field as needed.		
temp	nvoCmpBSctTmp	CompBSuctLineTemp_st	Output_Active	- -	F	Compressor B suction line temperature		
count	nvoABCBAlmStat	ABCBLockoutStatusAna_st	Output_Active	- -	no units	Most recent fault code for compressor B		
count	nvoABCAAlmStat	ABCALockoutStatusAna_st	Output_Active	- -	no units	Most recent fault code for compressor A		
temp	nvoCmpAFP2	ABCA_FP2_st	Output_Active	- -	F	Compressor A FP2 temperature value		
temp	nvoCmpAFP1	ABCA_FP1_st	Output_Active	- -	F	Compressor A FP1 temperature value		
temp	nvoCmpBFP2	ABCB_FP2_st	Output_Active	- -	F	Compressor B FP2 temperature value		

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temp	nvoCmpBFP1	ABCB_FP1_st	Output_Active	- -	F	Compressor B FP1 temperature value		
count	nvoSysStatus	SystemStatus_st	Output_Active	- -	no units	Displays the current overall system status. Possible values are: 1 = Normal 2 = Alarm 3 = Shutdown 4 = Load Shed A 5 = Load Shed B 6 = Load Shed A & B 7 = AXB A Communication Loss 8 = AXB B Communication Loss 9 = AXB A & B Communication Loss 10 = ABC A Communication Loss 11 = ABC B Communication Loss 12 = ABC A & B Communication Loss 13 = ABC A & ABC B DIP Switch Mismatch 14 = Load Entering Water Temperature Alarm 15 = Load Leaving Water Temperature Alarm 16 = Source Entering Water Temperature Alarm		
count	nvoUnitMode	UnitMode_st	Output_Active	- -	no units	Displays the current overall system operating mode. Possible values are: 1 = Standby 3 = Single Compressor Cooling 4 = Both Compressors Cooling 6 = Single Compressor Heating 7 = Both Compressors Heating 10 = Emergency Shutdown 11 = Load Shed 12 = Lockout A 13 = Test Mode 15 = Lockout B 18 = Single Compressor w/Lockout 19 = Full Lockout 31 = Source Flow Switch Fault 32 = Load Flow Switch Fault		
bit0	nvoABCAHdwAlm_bit0	ABCA_HDW_ALM_st	Output_Active	- -	no units	Status of ABC A alarm output	Off	On

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Element Type	**NV Name**	**Reference Name**	**Direction**	**Default Value**	**Units**	**Description**	**Inactive = 0**	**Active = 1**
bit0	nvoABCAHdwY1_bit0	ABCA_HDW_Y1_st	Output_Active	- -	no units	Status of ABC A physical Y1 input	Off	On
bit0	nvoABCAHdwY2_bit0	ABCA_HDW_Y2_st	Output_Active	- -	no units	Status of ABC A physical Y2 input	Off	On
bit0	nvoABCAHdwOB_bit0	ABCA_HDW_OB_st	Output_Active	- -	no units	Status of ABC A physical O/B input	Off	On
bit0	nvoABCAHdwES_bit0	ABCA_HDW_ES_st	Output_Active	- -	no units	Status of ABC A physical emergency shutdown input	Off	On
bit0	nvoABCAHdwLPS_bit0	ABCA_HDW_LPS_st	Output_Active	- -	no units	Status of ABC A physical low pressure switch input	Off	On
bit0	nvoABCAHdwHPS_bit0	ABCA_HDW_HPS_st	Output_Active	- -	no units	Status of ABC A physical high pressure switch input	Off	On
bit0	nvoABCAHdwLS_bit0	ABCA_HDW_LS_st	Output_Active	- -	no units	Status of ABC A physical load shed input	Off	On
bit0	nvoABCAHdwCC_bit0	ABCA_HDW_CC_st	Output_Active	- -	no units	Status of ABC A compressor output	Off	On
bit0	nvoABCAHdwRV_bit0	ABCA_HDW_RV_st	Output_Active	- -	no units	Status of ABC A reversing valve output	Off	On
bit0	nvoABCAHdwACC_bit0	ABCA_HDW_ACC_st	Output_Active	- -	no units	Status of ABC A accessory relay output	Off	On
bit0	nvoABCBHdwAlm_bit0	ABCB_HDW_ALM_st	Output_Active	- -	no units	Status of ABC B alarm output	Off	On
bit0	nvoABCBHdwY1_bit0	ABCB_HDW_Y1_st	Output_Active	- -	no units	Status of ABC B physical Y1 input	Off	On
bit0	nvoABCBHdwY2_bit0	ABCB_HDW_Y2_st	Output_Active	- -	no units	Status of ABC B physical Y2 input	Off	On
bit0	nvoABCBHdwOB_bit0	ABCB_HDW_OB_st	Output_Active	- -	no units	Status of ABC B physical O/B input	Off	On
bit0	nvoABCBHdwES_bit0	ABCB_HDW_ES_st	Output_Active	- -	no units	Status of ABC B physical emergency shutdown input	Off	On
bit0	nvoABCBHdwLPS_bit0	ABCB_HDW_LPS_st	Output_Active	- -	no units	Status of ABC B physical low pressure switch input	Off	On
bit0	nvoABCBHdwHPS_bit0	ABCB_HDW_HPS_st	Output_Active	- -	no units	Status of ABC B physical high pressure switch input	Off	On
bit0	nvoABCBHdwLS_bit0	ABCB_HDW_LS_st	Output_Active	- -	no units	Status of ABC B physical load shed input	Off	On
bit0	nvoABCBHdwCC_bit0	ABCB_HDW_CC_st	Output_Active	- -	no units	Status of ABC B compressor output	Off	On
bit0	nvoABCBHdwRV_bit0	ABCB_HDW_RV_st	Output_Active	- -	no units	Status of ABC B reversing valve output	Off	On
bit0	nvoABCBHdwACC_bit0	ABCB_HDW_ACC_st	Output_Active	- -	no units	Status of ABC B accessory relay output	Off	On
bit0	nciLonSPEna_bit0	EnableLonSetpoints	Input_Passive	Disabled	no units	Control point to enable Lon setpoint values	Disabled	Enabled
temp	nciHeatSP	HeatingSetpoint_c	Input_Passive	80	F	Heating set point used for set point control mode		
temp	nciCoolSP	CoolingSetpoint_c	Input_Passive	50	F	Cooling set point used for set point control mode		
bit0	nciLonNetCtrl_bit0	LonNetCtl	Input_Passive	Disabled	no units	Control point to enable Lon for network compressor control	Disabled	Enabled
bit0	nciLonModeCtl_bit0	LonModeCtl	Input_Passive	Disabled	no units	Control point to enable Lon mode control	Disabled	Enabled
bit0	nviAlmReset_bit0	AlarmReset_c	Input_Passive	Normal	no units	Alarm reset command to clear lockout condition. This point should always be cleared after the lockout condition is no longer present	Normal	Reset
bit0	nviEmShutdown_bit0	EmShutdown_c	Input_Passive	Normal	no units	Enable (True) or Disable (False) Emergency Shutdown	Normal	Shutdown
bit0	nviLoadShedA_bit0	LoadShedB_c	Input_Passive	Normal	no units	Enable (True) or Disable (False) Load Shed on Compressor B	Normal	Shutdown
bit0	nviLoadShedB_bit0	LoadShedA_c	Input_Passive	Normal	no units	Enable (True) or Disable (False) Load Shed on Compressor A	Normal	Shutdown

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bit0	nviY1Cmd_bit0	NetworkY1Command_c	Input_Passive	Off	no units	Network command for compressor B when system is configured for Network control	Off	On
bit0	nviY2Cmd_bit0	NetworkY2Command_c	Input_Passive	Off	no units	Network command for compressor A when system is configured for Network control	Off	On
bit0	nviModeCmd_bit0	Mode_c	Input_Passive	Off	no units	Selection of current operating mode for non header rack applications. Options are Cool (False) and Heat (True).	Off	On
bit0	nciLonValveCtrl_bit0	NetValveCtl	Input_Passive	FALSE	no units	Control point to enable network override of control, bypass, and isolation valves	FALSE	TRUE
count	nviLoad3WayMan	ManLoad3WayValvePct_c	Input_Passive	0	%	Manually controlled position of 3-way load control valve. The manual control position is used when nciLonValveCtrl_bit0 is Active, and manual control values are higher priority and will override position determined by normal control logic		
count	nviSource3WayMan	ManSource3WayValvePct_c	Input_Passive	0	%	Manually controlled position of 3-way source control valve. The manual control position is used when nciLonValveCtrl_bit0 is Active, and manual control values are higher priority and will override position determined by normal control logic		
count	nviColdBypassMan	ManColdBypassValvePct_c	Input_Passive	0	%	Manually controlled position of cold water loop bypass valve. The manual control position is used when nciLonValveCtrl_bit0 is Active, and manual control values are higher priority and will override position determined by normal control logic or the network control value (nviNetColdBypass)		
count	nviHotBypassMan	ManHotBypassValvePct_c	Input_Passive	0	%	Manually controlled position of hot water loop bypass valve. The manual control position is used when nciLonValveCtrl_bit0 is Active, and manual control values are higher priority and will override position determined by normal control logic or the network control value (nviNetHotBypass)		
count	nviGeoBypassMan	ManGeoBypassValvePct_c	Input_Passive	0	%	Manually controlled position of geothermal water loop bypass valve. The manual control position is used when nciLonValveCtrl_bit0 is Active, and manual control values are higher priority and will override position determined by normal control logic or the network control value (nviNetGeoBypass)		
bit0	nviIsoValvesMan_bit0	ManIsoValves_c	Input_Passive	FALSE	no units	Manual control value for isolation valves. The manual control value is used when nciLonValveCtrl_bit0 is Active, and the manual control value is higher priority and will override the position determined by normal control logic	FALSE	TRUE
bit0	nciLonNetBypassCtrl_bit0	NetBypassCtrl_c	Input_Passive	FALSE	no units	Selection between local (Inactive or False) and network (Active or True) control of bypass valves	FALSE	TRUE
count	nviNetColdBypass	NetColdBypass_c	Input_Passive	0	%	Control position for cold bypass valve when under network control		
count	nviNetHotBypass	NetHotBypass_c	Input_Passive	0	%	Control position for hot bypass valve when under network control		
count	nviNetGeoBypass	NetGeoBypass_c	Input_Passive	0	%	Control position for geo bypass valve when under network control		

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Element Type	**NV Name**	**Reference Name**	**Direction**	**Default Value**	**Units**	**Description**	**Inactive = 0**	**Active = 1**
bit0	nciLonNetworkTemp_bit0	NetTempCtrl	Input_Passive	FALSE	no units	Control point to enable Lon supplied network temperature values to replace locally measured values.	FALSE	TRUE
temp	nviNetColdTemp	CW_NetworkTemp_c	Input_Passive	- -	F	Network supplied cold water temperature value for setpoint control with network temperature for header rack applications.		
temp	nviNetHotTemp	HW_NetworkTemp_c	Input_Passive	- -	F	Network supplied hot water temperature value for setpoint control with network temperature for header rack applications.		
temp	nviNetGeoTemp	Geo_NetworkTemp_c	Input_Passive	- -	F	Network supplied geothermal loop temperature for header rack applications.		
temp	nvoLoadTempIn	LoadInTemp_st	Output_Active	- -	F	Load heat exchanger entering water temperature for header rack applications		
temp	nvoLoadTempOut	LoadOutTemp_st	Output_Active	- -	F	Load heat exchanger leaving water temperature for header rack applications		
temp	nvoSourceTempIn	SourceInTemp_st	Output_Active	- -	F	Source heat exchanger entering water temperature for header rack applications		
temp	nvoSourceTempOut	SourceOutTemp_st	Output_Active	- -	F	Source heat exchanger leaving water temperature for header rack applications		
temp	nvoColdHeaderIn	ColdHeaderInletTemp_st	Output_Active	- -	F	Cold water loop inlet temperature measured by HydroLink controller		
temp	nvoColdHeaderOut	ColdHeaderOutletTemp_st	Output_Active	- -	F	Cold water loop outlet temperature measured by HydroLink controller		
temp	nvoHotHeaderIn	HotHeaderInletTemp_st	Output_Active	- -	F	Hot water loop inlet temperature measured by HydroLink controller		
temp	nvoHotHeaderOut	HotHeaderOutletTemp_st	Output_Active	- -	F	Hot water loop outlet temperature measured by HydroLink controller		
temp	nvoGeoHeaderIn	GeoHeaderInletTemp_st	Output_Active	- -	F	Geothermal loop water inlet temperature measured by HydroLink controller		
temp	nvoGeoHeader	GeoHeaderOutletTemp_st	Output_Active	- -	F	Geothermal loop water outlet temperature measured by HydroLink controller		
temp	nvoUsableColdTemp	ActiveColdWaterTemp_st	Output_Active	- -	F	Currently active cold water control temperature for header rack applications		
temp	nvoUsableHotTemp	ActiveHotWaterTemp_st	Output_Active	- -	F	Currently active hot water control temperature for header rack applications		
temp	nvoUsableGeoTemp	ActiveGeoWaterTemp_st	Output_Active	- -	F	Currently active geothermal water control temperature for header rack applications		
count	nvoCurrentDemand	CurrentDemandPct_st	Output_Active	- -	%	Currently calculated PID operating demand percentage		
count	nvoLoad3WayValve	Load3WayValve_st	Output_Active	- -	%	Current position of 3-way load control valve		
count	nvoSource3WayValve	Source3WayValve_st	Output_Active	- -	%	Current position of 3-way source control valve		
count	nvoColdBypassValve	ColdBypassValve_st	Output_Active	- -	%	Current position of cold water loop bypass valve		
count	nvoHotBypassValve	HotBypassValve_st	Output_Active	- -	%	Current position of hot water loop bypass valve		
count	nvoGeoBypassValve	GeoBypassValve_st	Output_Active	- -	%	Current position of geothermal loop bypass valve		
bit0	nvoColdSensorFault_bit0	CWSensorFault_st	Output_Active	- -	no units	Indication that the currently selected cold water control temperature is invalid.	FALSE	TRUE
bit0	nvoHotSensorFault_bit0	HWSensorFault_st	Output_Active	- -	no units	Indication that the currently selected hot water control temperature is invalid.	FALSE	TRUE

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							State Text	
Element Type	**NV Name**	**Reference Name**	**Direction**	**Default Value**	**Units**	**Description**	**Inactive = 0**	**Active = 1**
bit0	nviNetCapCtrl_bit0	NetCapacityCtrl_c	Input_Passive	FALSE	no units	Selection between local (Disabled or False) and network (Enabled or True) determination of total system target operating capacity. When this point is Enabled the total system target capacity set by nviNetCapacityVS takes priority over the internally calculated value.	FALSE	TRUE
bit0	nviNetSpeedCtrl_bit0	NetVarSpdCtrl_c	Input_Passive	FALSE	no units	Selection between local (Disabled or False) and network (Enabled or True) determination of variable speed compressor target operating capacity. When this point is Enabled the variable speed compressor target capacity set by nviNetSpeedVS and the fixed compressor control set by nviNetFixedCtrl_bit0 take priority over the internal control values based on total system target operating capacity.	FALSE	TRUE
bit0	nviNetFixedCtrl_bit0	NetFixedSpeed_c	Input_Passive	FALSE	no units	Current fixed compressor control value for network control of variable speed system. This point takes priority over internally calculated control value when nviNetSpeedCtrl_bit0 is set to "Enabled" but does not stop the internal calculation logic from operating.	FALSE	TRUE
count	nviNetCapacityVS	NetCapacity_c	Input_Passive	0	%	Current target system capacity for network capacity control of variable speed system. This point takes priority over internally calculated system demand percentage when nviNetCapCtrl_bit0 is set to "Enabled" but does not stop the internal demand calculation logic from operating.		
count	nviNetSpeedVS	NetVarSpdPct_c	Input_Passive	0	%	Current target variable speed compressor capacity for network control of variable speed system. This point takes priority over internally calculated compressor capacity when nviNetSpeedCtrl_bit0 is set to "Enabled" but does not stop the internal calculation logic from operating.		
count	nvoSystemDemand	TotalVarSpdDemand_st	Output_Active	- -	%	Current system operating demand for variable and fixed speed compressors		
count	nvoVSCompTarget	VarSpeedOutput_st	Output_Active	- -	%	Current variable speed compressor target speed		
count	nvoVSCompSpeed	CurrentCompPct_st	Output_Active	- -	%	Current variable speed compressor operating percentage		
count	nvoVSCompRPM	CurrentCompRPM_st	Output_Active	- -	RPM	Current variable speed compressor operating speed		