H8920-2 POWERLINK® G3 to LonTalk® Integration Node



Square D POWERLINK G3 customers have requested a solution to connect their lighting panel to a LonWorks® system allowing for more system flexibility. The H8920-2 Powerlink G3 to LonTalk Integration Node provides this solution.

Groups of circuit breakers (zones) can be controlled using LonTalk input variables, which are translated to Modbus® commands by the H8920-2. The H8920-2 node continuously polls the controller for zone status and breaker non-responding information. All output network variables are immediately updated with this received data. If a control network variable is updated with a change in state, it is sent to the controller to command the zone.

All data exchanged between the node and the POWERLINK G3 control module is fully checksummed to ensure data integrity. If corrupt data is detected, or if no response is received, the output network variables are not updated and retain their previous value. The nvoModbusStatus object will be set to the ON state, indicating a Modbus failure when five consecutive communication errors occur. This status can be used to verify reliability of the output network variables.

The H8920-2 is designed for ease of installation with flexible mounting options to save time and money. The H8920-2 can even be mounted directly to a 4" junction box. With its flexibility and ease of installation, the H8920-2 provides a cost-effective solution for interfacing POWERLINK G3 to LonWorks networks.

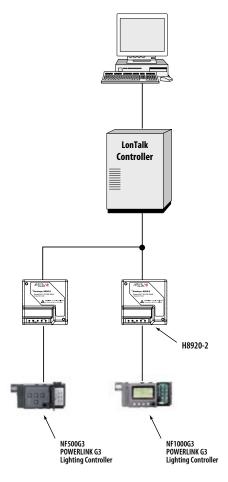
Applications

- Lighting control
- Energy management and performance contracting
- Load shedding and demand control

Easy integration to Echelon networks

- The H8920-2 is designed for easy integration of POWERLINK G3 lighting panels
- Easy, cost-effective connectivity to LonWorks systems...makes open connectivity possible
- Flexible mounting options save time and money

APPLICATION EXAMPLE



ORDERING INFORMATION

MODEL	DESCRIPTION
H8920-2	POWERLINK G3 to LonTalk integration node

SPECIFICATIONS

LonWorks Network	Free topology transceiver, 78 kbps
Modbus Network	RTU 9600 BAUD, 8N1 format
Input Power*	16-24VAC/DC, 100mA max.
Temperature Range	0 to 60°C
Humidity Range	0 - 95% non-condensing

^{*}Power provided by POWERLINK GE controller

POWERLINK™ G3 CONTROLLER

65 60		
<u>NAME</u>	<u>TYPE</u>	DESCRIPTION
nviValue[0]	SNVT_switch	Zone 1 Control
nviValue[1]	SNVT_switch	Zone 2 Control
nviValue[2]	SNVT_switch	Zone 3 Control
nviValue[3]	SNVT_switch	Zone 4 Control
nviValue[4]	SNVT_switch	Zone 5 Control
nviValue[5]	SNVT_switch	Zone 6 Control
nviValue[6]	SNVT_switch	Zone 7 Control
nviValue[7]	SNVT_switch	Zone 8 Control
nviValue[8]	SNVT_switch	Zone 9 Control
nviValue[9]	SNVT_switch	Zone 10 Control
nviValue[10]	SNVT_switch	Zone 11 Control
nviValue[11]	SNVT_switch	Zone 12 Control
nviValue[12]	SNVT_switch	Zone 13 Control
nviValue[13]	SNVT_switch	Zone 14 Control
nviValue[14]	SNVT_switch	Zone 15 Control
nviValue[15]	SNVT_switch	Zone 16 Control
nvoValueFb[0]	SNVT_switch	Zone 1 State
nvoValueFb[1]	SNVT_switch	Zone 2 State
nvoValueFb[2]	SNVT_switch	Zone 3 State
nvoValueFb[3]	SNVT_switch	Zone 4 State
nvoValueFb[4]	SNVT_switch	Zone 5 State
nvoValueFb[5]	SNVT_switch	Zone 6 State
nvoValueFb[6]	SNVT_switch	Zone 7 State
nvoValueFb[7]	SNVT_switch	Zone 8 State
nvoValueFb[8]	SNVT_switch	Zone 9 State
nvoValueFb[9]	SNVT_switch	Zone 10 State
nvoValueFb[10]	SNVT_switch	Zone 11 State
nvoValueFb[11]	SNVT_switch	Zone 12 State
nvoValueFb[12]	SNVT_switch	Zone 13 State
nvoValueFb[13]	SNVT_switch	Zone 14 State
nvoValueFb[14]	SNVT_switch	Zone 15 State
nvoValueFb[15]	SNVT_switch	Zone 16 State

OPEN-LOOP SENSOR OBJECTS

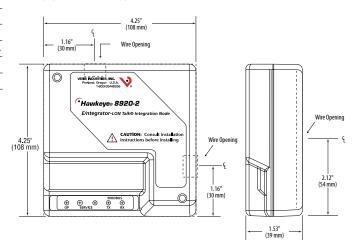
CLOSED-LOOP ACTUATOR OBJECTS

<u>NAME</u>	<u>TYPE</u>	<u>DESCRIPTION</u>
nvoModbusStatus	SNVT_switch	ON indicates comms loss with controller
nvoNonRespPanel[0]	SNVT_switch	Breaker Non-Responding in Panel 1
nvoNonRespPanel[1]	SNVT_switch	Breaker Non-Responding in Panel 2
nvoNonRespPanel[2]	SNVT_switch	Breaker Non-Responding in Panel 3
nvoNonRespPanel[3]	SNVT_switch	Breaker Non-Responding in Panel 4
nvoNonRespPanel[4]	SNVT_switch	Breaker Non-Responding in Panel 5
nvoNonRespPanel[5]	SNVT_switch	Breaker Non-Responding in Panel 6
nvoNonRespPanel[6]	SNVT_switch	Breaker Non-Responding in Panel 7
nvoNonRespPanel[7]	SNVT_switch	Breaker Non-Responding in Panel 8

CONFIGURATION PROPERTIES

<u>NAME</u>	<u>TYPE</u>	<u>range</u>
nciMaxReceiveT	SNVT_time_sec	0.0-6553.4 sec
(MaxReceiveTime)		(0.1 sec resolution)

DIMENSIONAL DRAWINGS



DESCRIPTION

If no LonWorks network variable update occurs for a duration exceeding the maximum receive time, all zones will be turned ON. Default value is set to 15 minutes. (900.0 sec)

H8920-2