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SlotServer ControlLogix -- LonWorks Open Interface Module

Part #: Module Version:

FS-RA-CLX-LON-001 0.00

Product Description

The SlotServer LonWorks Open Interface allows an Allen Bradley ControlLogix platform to pass data between a ControlLogix CPU and a standard LonWorks communications network. The SlotServer Module provides a standard generic profile in LonWorks that allows most of the more common Standard Network Variable Types (SNVT's) to be bound to the SlotServer for data transfer.

Physically configured to plug into a standard ControlLogix rack, the SlotServer Module is configured using standard RSLogix message block reads to allow for efficient transfer of large blocks of data.

SlotServer provides serial and Ethernet ports to enable ControlLogix interface to any of the 80+ protocols available in the FieldServer driver library including BACnet, Metasys, Modbus, DNP 3.0 and a wide range of proprietary and legacy protocols used in the building automation, fire alarm panels and process control industries.

About LonWorks and Profiling

Inherent to the design of LonWorks is the intention that all nodes residing on a LonWorks possess a profile which accurately describes the network variables (tags) available to the LonWorks network. This profile is declared to the LonWorks network by means of an External Interface File (XIF). This XIF remains unchanged for any particular profile. In other words, a change in the XIF is by definition a new profile.

The Open Interface profile for SlotServer provides a generic list of SNVT's that can be used to bind the most common LonWorks data types to the SlotServer for data transfer. This document describes the fixed Open Interface profile for the SlotServer. However, as a LonMark compatible product, the SlotServer platform is also capable of supporting other profiles. For further information, please contact FieldServer Technologies and enquire about available Specific Profiles and other SlotServer Profiling Services.





Technical Specifications

Slot width	1	
BackPlane Current Load	0.6 A	
Operating Temperature	0° to 60 ° C (32 ° to 140° F)	
Storage Temperature	-40° to 85° C (-40° to 185° F)	
Humidity	5 – 95% (non-condensing)	
Allen Bradley Platform:	ControlLogix 1756 Rack	
LonWorks Connection	TP/FT-10	
type:		
LonWorks Connection Capability	As an implicitly bound object in LonWorks, the LonWorks protocol supports the binding of this device to no more than 15 other nodes. <u>Note:</u> A LonWorks Network Management Tool (e.g.: LonMaker, Rover, LonWatcher etc) is required to commission a LonWorks network. This tool is used for creating the variable bindings on the network.	





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Functional Specification:

The following Tags are available in the SlotServer LonWorks Open Interface Profile:

Tag Name	Tag Qty	Lon SNVT Type	SNVT Qty
amp_in	60	SNVT_amp	60
chiller_sts_in	45	SNVT_chlr_status	15
count_in	60	SNVT_count_f	60
count_inc_in	60	SNVT_count_inc_f	60
flow_in	30	SNVT_flow_f	30
freq_in	30	SNVT_freq_hz	30
hvac_mode_in	30	SNVT_hvac_mode	30
hvac_sts_in	105	SNVT_hvac_status	15
lev_disc_in	30	SNVT_lev_disc	30
obj_sts_in	60	SNVT_obj_status	30
occupancy_in	60	SNVT_occupancy	60
percent_in	180	SNVT_lev_percent	180
ppm_in	30	SNVT_ppm	30
press_in	60	SNVT_press	60
setpoint_in	180	SNVT_setpoint	30
state_in	90	SNVT_state	90
switch_in	360	SNVT_switch	180
temp_in	180	SNVT_temp_p	180
tod_event_in	45	SNVT_tod_event	15
volt_ac_in	60	SNVT_volt_ac	60
volt_in	60	SNVT_volt	60

Input Tags from LonWorks to CPU (Data Table Read):

Output Tags from CPU to LonWorks (Data Table Write):

Tag Name	Tag Qty	Lon SNVT Type	SNVT Quant ity
amp_out	60	SNVT_amp	60
chiller_sts_out	45	SNVT_chlr_sts	15
count_out	60	SNVT_count_f	60
count_outc_out	60	SNVT_count_inc_f	60
flow_out	30	SNVT_flow_f	30
freq_out	30	SNVT_freq_hz	30
hvac_mode_out	30	SNVT_hvac_mode	30
hvac_sts_out	105	SNVT_hvac_status	15
lev_disc_out	30	SNVT_lev_disc	30
obj_sts_out	60	SNVT_obj_status	30
occupancy_out	60	SNVT_occupancy	60
percent_out	180	SNVT_lev_percent	180
ppm_out	30	SNVT_ppm	30
press_out	60	SNVT_press	60
setpoint_out	180	SNVT_setpoint	30
state_out	90	SNVT_state	90
switch_out	360	SNVT_switch	180
temp_out	180	SNVT_temp_p	180
tod_event_out	45	SNVT_tod_event	15
volt_ac_out	60	SNVT_volt_ac	60
volt_out	60	SNVT_volt	60

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