Level Measurement Communication

SmartLinx module

Technical specifications



SmartLinx modules provide direct digital connection to popular industrial communications buses with true plug-and-play compatibility with products manufactured by Siemens.

Benefits

Overview

- · Fast, easy installation
- Direct connection: no additional installation required
- Scaleable application layer allows for optimized network bandwidth and memory requirements (for PROFIBUS DPV0 and DeviceNet only)
- Modules available for PROFIBUS DPV0, PROFIBUS DPV1, ProfiNet, DeviceNET, Modbus TCP/IP, and Ethernet/IP

Application

With the addition of a SmartLinx module, Siemens instruments can be connected to a variety of industrial communications networks.

They're fast and easy to install, and can be added at any time. The module simply plugs into the socket on any SmartLinx enabled product. They require no secondary private buses or gateways and no separate wiring. There are no extra boxes to connect to your network so there's a minimum load on engineering and maintenance staff.

SmartLinx provides all data from the instrument, including measurement and status, and allows changes to operation parameters to be done over the bus or telemetry link. The user can select which data in the application layer to transfer over the bus. This selection saves bandwidth and memory and optimizes data throughput and speeds up the network, enabling you to connect more instruments to your network.

Selecting a communications module: PROFIBUS DPV0 versus PROFIBUS DPV1

The PROFIBUS DPV1 card was added to MultiRanger 200 HMI and HydroRanger 200 HMI to provide acyclic communication and SIMATIC PDM support over PROFIBUS. For backward compatibility, the PROFIBUS DPV0 card can also be used with MultiRanger 200 HMI and HydroRanger 200 HMI.

MultiRanger 100/200 and HydroRanger 200 are compatible only with the PROFIBUS DPV0 module.

Module type	PROFIBUS DPV0	
Interface	RS 485 (PROFIBUS standard)	
Transmission rate	All valid PROFIBUS DP rates from 9 600 Kbps 12 Mbps	
Slave address	0 99	
Connection	Slave	
SmartLinx module compatibility	 MultiRanger 200 HMI MultiRanger 100/200 HydroRanger 200 HMI HydroRanger 200 	
Module type	PROFIBUS DPV1	
Interface	RS 485 (PROFIBUS standard)	
Transmission rate	All valid PROFIBUS DP rates from 9 600 Kbps 12 Mbps 0 99	
Slave address		
Connection	Slave	
SmartLinx module compatibility	MultiRanger 200 HMIHydroRanger 200 HMI	
Module type	DeviceNet	
Interface	DeviceNet physical layer	
Transmission rate in kbps	125, 250, 500	
MAC address	0 63	
Connection	Slave (group 2)	
SmartLinx module compatibility	 MultiRanger 200 HMI MultiRanger 100/200 HydroRanger 200 HMI HydroRanger 200 	

	Selection and Ordering data	Article No.
	SmartLinx module for: MultiRanger 200 HMI, MultiRanger 100/200, HydroRanger 200 HMI, and HydroRanger 200	
	PROFIBUS DPV0 module	7ML1830-1HR
	PROFIBUS DPV1 module	A5E35778741
	DeviceNet module	7ML1830-1HT
	ProfiNet IO module	7ML1830-1PM
	Modbus TCP/IP, Ethernet/IP	7ML1830-1PN
	Operating Instructions	
	All literature is available to download for free, in a	

range of languages, at http://www.siemens.com/ processinstrumentation/documentation