

Optech Network Solutions Prime Connect 4056s Datasheet

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Specification	**Prime Connect 4056s**
Product Type	Industrial RS-232/RS-422/RS-485 to Fiber Converter
Serial Interfaces	RS-232, RS-422, RS-485
Number of Serial Ports	2 serial interface channels
Supported Serial Modes	RS-232, RS-422, RS-485
Baud Rate	50 bps to 921.6 kbps
Non-Standard Baud Rates	Supported, subject to communication requirements
Data Direction Control	Automatic data-direction control for RS-485
Network Topology	Point-to-point and fiber-ring configurations
Fiber Interface	Optical fiber interface supporting application-specific fiber transceiver configuration
Fiber Type	Multi-mode Fiber (MMF) / Single-mode Fiber (SMF)
Typical Fiber Distance	Up to 5 km with multi-mode fiber; up to 40 km with single-mode fiber, depending on optical configuration
Typical Wavelength	Approximately 850 nm for multi-mode; approximately 1310 nm for single-mode configuration
Fiber Connector	Available according to the selected Prime Connect 4056s optical interface configuration
RS-232 Signals	TxD, RxD, GND
RS-422 Signals	Tx+, Tx-, Rx+, Rx-, GND
RS-485 4-Wire Signals	Tx+, Tx-, Rx+, Rx-, GND
RS-485 2-Wire Signals	Data+, Data-, GND
RS-485 Termination	Configurable termination according to network requirements
RS-485 Biasing	Configurable pull-up/pull-down biasing
Latency	Low-latency serial-to-fiber conversion
Power Input	12–48 VDC
Power Inputs	1
Overload Protection	Supported
Reverse Polarity Protection	Supported

Power Connection	Industrial terminal-block connection
Power Consumption	Approximately 70–140 mA at 12–48 VDC, depending on configuration and operating conditions
Housing	Rugged metal enclosure
Ingress Protection	IP30
Dimensions with Mounting Ears	Approximately 90 × 100 × 22 mm
Dimensions without Mounting Ears Approximately 67 × 100 × 22 mm	
Weight	Approximately 320 g
Installation	Wall mounting / panel mounting
Standard Operating Temperature	0°C to 60°C
Wide-Temperature Option	-40°C to 75°C
Storage Temperature	-40°C to 85°C
Operating Humidity	5% to 95% RH, non-condensing
Fiber Isolation	Provides isolation between serial electrical interfaces and the fiber communication link
EMI/Interference Protection	Designed to reduce susceptibility to electromagnetic and electrical interference
Status Indication	Power, serial communication and fiber-link status indicators
Enclosure Cooling	Passive cooling through enclosure design
Mounting Hardware	Mounting hardware appropriate to the selected installation configuration
