

Control & Communications

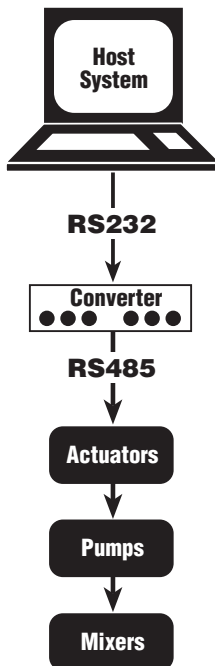
Product Bulletin



Self-Steering Converter - Front Panel



Self-Steering Converter - Rear Panel



Typical Network



Steered Converter - Front Panel



Steered Converter - Rear Panel

RS-232 / RS-485 Self Steering Signal Converter with High Level Surge Suppression

Product Description

The Limitorque RS-232 / RS-485 Self Steering Signal Converter connects to a standard RS-232 port on a PC or compatible device and converts the RS-232 signal to an RS-485 signal. This conversion extends the useful line length of the RS-232 system, allows for multi-drop or loop capability on an RS-232 line, and enables the use of a PC or compatible device to interface with RS-485 devices. The surge protection portion of the converter protects the PC or other device from high level spikes and other transients potentially encountered on long RS-485 lines.

General Description

The Auto-steering converter uses patented Limitorque circuitry to sense the direction of data, process the data, and retransmit the data via the appropriate output port. The data is processed using a noise elimination circuit ensuring that only valid data is retransmitted. Received data is sent to the Auto-Steering circuit for proper port direction control and signal processing. The data bits are checked, recentered and re-clocked before being directed to the proper output port. Data is transmitted via the output port to the network.

Specifications

Parameter	Specifications
Baud Rate	300 baud to 62.5 Kb
Protocols	Modbus, Bitbus
Power	110-220 VAC 50/60 Hz, single phase 10 Watts, Selectable
Fuse	250 VAC 1/4 Amp
Connectors	RS-232 - DB9 RS-485 - Detachable 5 pin (Steered) RS-485 - Detachable 4 pin (Self Steered)
Indicators	
Steered	PWR1, PWR2, TxD, RxD, RTS/DTR
Self Steered	RS-232 - Power, TxD, RxD RS-485 - Power, TxD, RxD
Surge Protection	In accordance with IEC-801.5 to 1.5kV
Operating Temperature Range	0 to 70° C
Operating Humidity	95% Relative (Non condensing)

RS-232 / RS-485 Steered Signal Converter with High Level Surge Suppression

Product Description

The Limitorque RS-232 / RS-485 Signal Converter connects to a standard RS-232 port on a PC or compatible device and converts the RS-232 signal to an RS-485 signal. This conversion extends the useful line length of the RS-232 system, allows for multi-drop or loop capability on an RS-232 line, and enables the use of a PC or compatible device to interface with RS-485 devices. The surge protection portion of the converter protects the PC or other device from high level spikes and other transients potentially encountered on long RS-485 lines.

General Description

RS-232 data is converted to TTL signals. The signals drive indicating LEDs and inputs of optical couplers that drive the RS-485 converter chip. The optical couplers isolate the PC hardware from the RS-485 network. The RS-485 chip is bidirectional and must be steered to place it in the transmit or receive mode. The software for the PC serial port or the Master Station must be able to toggle RTS or DTR in order to steer the converter. The RS-485 signal is passed through filtering and surge suppression components to the output port and to the network.

Self Steering

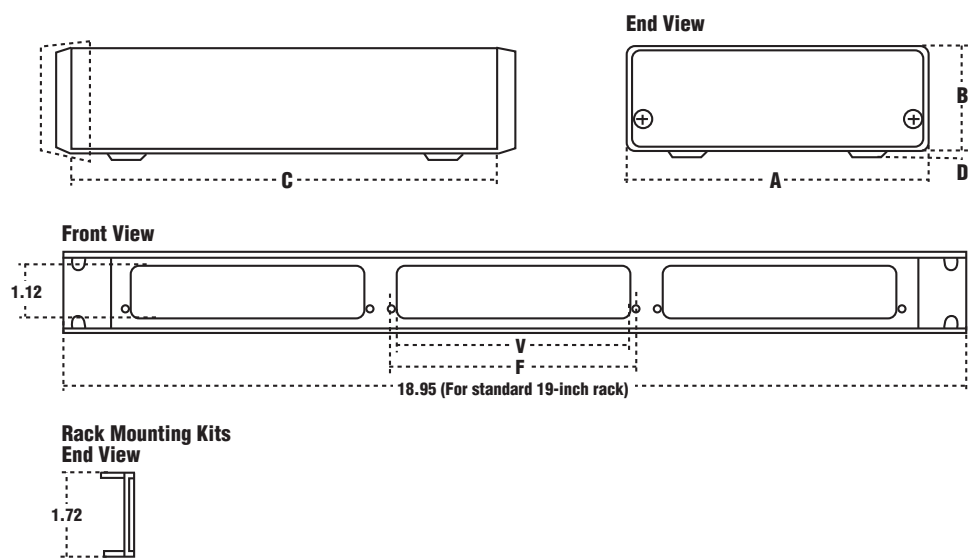
Description	Part Number
Complete converter w/AC power cord	61-825-1032-4
Input cable, RS-232, DB25M to DB 9F, 6 feet long	ESC-AT-PS/2 Cable
Three unit bracket for 19" rack mounting	ES5-K1PT-H03B
Blank insert panel for three unit rack	ES5-19216-001B
Assembly P/N	22300-760

Steered

Description	Part Number
Complete converter w/AC power cord	61-825-0966-4
Input cable, RS-232, DB25M to DB 9F, 6 feet long	ESC-AT-PS/2 Cable
Three unit bracket for 19" rack mounting	ES5-K1PT-H03B
Blank insert panel for three unit rack	ES5-19216-001B
Assembly P/N	22300-759

Dimensions

	inches	mm
A	5.6	141.5
B	1.5	38.6
C	6.0	152.4
D	0.2	5.3
F	5.2	130.9
V	5.0	128



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