



RS232C-RS485 / RS422 -Line Driver

MODEL: LD-16



INTRODUCTION

Milestone RS232 to RS422/RS 485 converter Model LD-16 is a **powerless** unit designed for high-speed data transmission between computer system and or peripherals over long distance under high noise conditions. The converter has 2-wire as well as 4-wire mode.

APPLICATIONS

Application for these converters can be for factory automation, programmable logic controllers, attendance recording systems, Barcode Readers, remote data transmission, remote terminals, EPABX etc.

Specifications:	
Input	RS232- Tx, Rx, CTS, GRD, +12VDC, +12V RET (D25 Female connector)
Output	RS485 – Tx+, Tx-, Rx+, Rx-, GRD on Terminal Block
Selection Switch	On one side of LD-16 a 2-way SELECT switch is located for selecting 2-Wire or 4-Wire mode in RS422/485 application.
Max. Distance	1.2Kms @ 19,200 bps
Output Cable	Shielded twisted pair cable –90 ohms/km
Front Panel LED	Tx, Rx, CTS and PWR (Power)
Size	104mm x 108mm x 35mm

TABLE I RS 232 Port – D25 Female Connector

Pin No.	Signal Name	In / Out
2	RX	Input
3	TX	Output
4	CTS	Input
7	Signal Ground	-
13	+12 V DC	Input
18	+12 V RET	-



TABLE II: RS485 port (5-Way Terminal Block)

Signal – 4 Wire	Signal – 2 Wire
-TX	-TX / -RX
+TX	+TX / +RX
+GND	GND
-RX	
+RX	

LONG DISTANCE CABLE LAYING

Long distance cable between two RS422/RS485 interfaces must be a twisted pair shielded cable. The pair should be used for each signal type + and – signal. This gives high common mode noise rejection. While laying the cable, care should be taken not to lay this cable parallel to power line cables. The cable resistance should not be more than 90 ohms/1000 meters. The cable should be run through conduit pipe for physical protection.

TABLE IV: OUTPUT CABLE – 4 Wire

LD 16 RS-485	Instrument
+TX	+TX
-TX	-RX
-RX	-TX
+RX	+TX



TABLE V: OUTPUT CABLE – 2 wire

LD 16 RS-485	Instrument
+TX	+TX / +RX
-TX	-TX / -RX

FRONT PANEL DIAGRAM

