

EMA-485D/485E RS-485 GPIO Decoder / Encoder



The EMIX RS-485 GPIO Decoder (EMA-485D) is designed to communicate serially with the EMIX RS-485 Encoder (EMA-485E) through the RS-485 protocol. The status of the 13 input ports at the Encoder (EMA-485E) are transmitted and reflected accordingly at the output ports of the Decoder (EMA-485D).

The maximum length of the serial RS-485 link is tested at 1.2Km. This means that both the Decoder and Encoder can be at a distance apart. Each Decoder and Encoder has individual Address and Group settings. The address settings are meant to uniquely identify each Decoder and Encoder while the Group settings are for the implementation of priority level among the Encoders with the same address but different group settings.

Based on the number of address bits and group bits, a total of 16 Decoders can be cascaded while a total of 3 Encoders can be connected to each Decoder. This results in a maximum total of interconnected 38 Encoders and 16 Decoders. Both the Encoders and Decoders are powered by a 24VDC.

Model	EMA-485D	EMA-485E
Input Voltage	24VAC	24VAC
Current Consumption	100mA	100mA
Each Output Port Current Sink	500mA	30mA
Each Output Port Voltage	50V	200mA
Number of Output Port	13	13
Data Speed	19200 bps	19200 bps
Serial Communication	RS485	RS485
Communication Distance	1.2KM (Max)	1.2KM (Max)
Cascade Units	16 Units (Max)	16 Units (Max)
Dimension (W x H x D)	130 x 25 x 85mm	130 x 25 x 85mm
Weight	0.5kg (Max)	0.5kg (Max)
Front Panel Indicator	3mm Led Power 3mm Led Active 3mm Led Error	3mm Led Power 3mm Led Active 3mm Led Error

Features

- > Transmission of Port Status
- > Serial RS-485 Protocol Maximum Baudrate of 19200Bps
- > Maximum of 16 Decoders and 48 Encoders Interlink
- > Active Low Input Scheme
- > Edge/Level Triggered Input Scheme
- > Active Low, Open Collector Output Scheme



^{*}Specifications and design are subjected to change without notice for improvements.