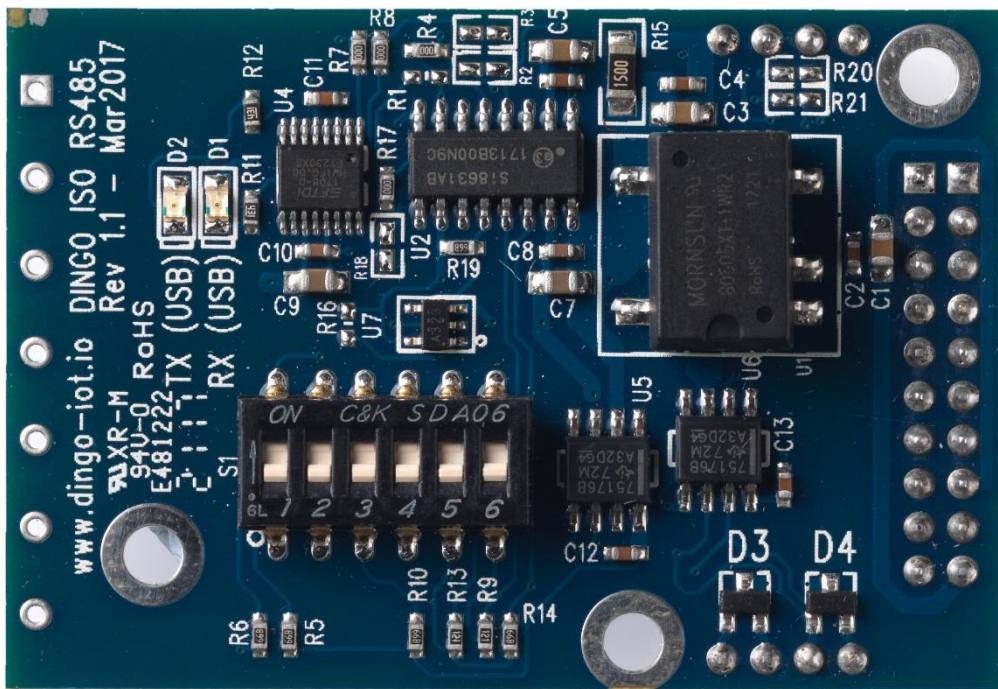


Opto Isolated RS485 Plug-in

Item specifications

Go-IoT Item Id:	DINGO-PG-RS485-01
RS485	4 Wire – Full Duplex 2 Wire – Half Duplex 120R Termination Resistors – Switchable
USB 2.0 Interface	1
TTL Serial Interface	1
Indicators	LEDs – TXD and RXD
Isolation Voltage	2.5kV RMS
Drivers	Linux
Expansion Connectors	1 x 20 way header from Base Board 2 x 4 way header from Base Board
DC Input	+5V
Temperature	-20 degree C to +85 degree C
Size (L x W)	60 x 40 mm
Country/Region of Manufacture:	EU



20WAY MBUS Interface

Pin	Port	Dir	Pull Up	Function	Description
1	+12V			POWER	
2	SPI_CLK	IN		SPI	SPI Clock
3	+3.3V			POWER	
4	SPI_MOSI	IN		SPI	SPI Master Out SLAVE In
5	TXD2	IN		Serial TX Data	Serial TTL Data from Host – Channel 2
6	SPI_MISO	IN		SPI	SPI Master In SLAVE Out
7	RXD2	OUT		Serial RX Data	Serial TTL Data to Host – Channel 2
8	SPI_SSx	OUT		SPI	SPI Slave Select
9	NEVENTx	OUT		Power Line	Output from Power Line Module
10	TXD3	IN		Serial TX Data	Serial TTL Data from Host – Channel 3
11	GND			POWER	
12	RXD3	OUT		Serial TX Data	Serial TTL Data to Host – Channel 3
13	ADDR1			IO	Module Specific
14	I2C_SCL	IN		I2C CLOCK	I2C – Channel 1 Clock
15	ADDR1			IO	Module Specific
16	I2C_SDA	BI		I2C DATA	I2C – Channel 1 Data
17	GPIOx	BI		IO	Module Specific
18	USB+	BI		USB Data	USB Positive Channel x
19	+5.0V	IN		POWER	+5.0V Output – 1000mA available
20	USB-	BI		USB Data	USB Negative Channel x

x = Channel / Number depend on location on Base Board

Blue Text is signals used on Module

8WAY MBUS Interface to External Connectors

21	TX1A	OUT	Isolated	Serial TX+ Data	RS485 TX Pin
22	TX1B	OUT	Isolated	Serial TX- Data	RS485 TX Pin
23	RX1A	IN	Isolated	Serial RX+ Data	RS486 RX Pin
24	RX1B	IN	Isolated	Serial RX- Data	RS486 RX Pin
25	ISOLATED GND				
26	Not used				
27	Not used				
28	Not used				

S1 Switch Positions

POS1	ON OFF	RTS Controllers Receiver Enable Receiver is Enabled
POS2	ON OFF	RTS Controllers Transmitter Enable Transmitter is Enabled
POS3	ON OFF	2 Wire RS485 4 Wire RS485
POS4	ON OFF	2 Wire RS485 4 Wire RS485
POS5	ON OFF	120ohm Terminator on RX Pins No Terminator
POS6	ON OFF	120ohm Terminator on TX Pins No Terminator