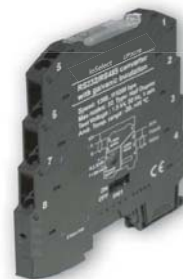


- Isolate and Amplify RS485 2 wire Bus Systems
- Speed selectable from 1200 bps to 115,200 bps
- 1500 Volt Isolation between X Port, Y Port and Power
- Ultra Thin - < 1/4"
- Ultra Low Power ~ 500 mW
- 19.2 to 30 Vdc Power
- DIP Switch Configuration



The UniPak HD Model UP307A is a configurable, DC powered, DIN rail mount RS485 to RS485 isolator/repeater with 1500 volt isolation between the serial ports and power. The dip switch selectable communication rates offer flexibility and ease of configuration. The module's ultra thin package (less than 1/4" thick) makes it ideal where panel space is a premium. Other features include a power bus option, quick connection spring clamp terminals and front panel diagnostic LEDs.

In operation both channels are receptive in their idle state. When data is detected that port is enabled and forces the opposing port to become the data outlet. The device returns to idle state (see switching time table) based on the communication speed. Two devices may be used as repeaters or isolators for a Full Duplex connection. It is useful to have the master's Tx line select the communication direction by selecting either the X->Y direction or the Y->X direction; although switching both dip-switches ON does not cause malfunctions, it inhibits the device with both ports in transmission.

Signal Isolation and Amplification made easy from ioSelect, powered by Seneca (K107A).

Communication Specifications

Speed:	1200 to 115,200 bps
LED Status:	
Flashing:	Data presence on X/Y port
Steady:	Inverted connection on X/Y port Or X-to Y / Y to X disabled
X Side Port and Y Side Port	RS485 Half duplex
Capacity:	31 Standard nodes DIP Switch enabled termination resistor 30 Vdc Protection
Handshake:	Timed automatic

Performance Specifications

Isolation:	1500 Vac 3-way: in-out-pwr
Humidity:	30-90% @ 40 °C
Operating	
Temperature:	-20 to +65 °C (-30 to 150 °F)
Storage	
Temperature:	-40 to 80 °C (-40 to 176 °F)
Power	
Requirements:	19.2 to 30 Vdc
Power	
Consumption:	500 mW
Dimensions:	6.2 x 93.1 x 102.5 mm (0.244 x 3.67 x 4.035 in)
Weight:	50 g (1.8 oz)

Ordering Information: **IOS-UP-307A**
IOS-K107A

Accessories: IOS-UP-HDBUS
IOS-UP-HDSUPPLY

RS485 Isolator/Repeater
RS485 Isolator/Repeater
Din Rail Power Connector (5 dual connectors per package)
Smart Power Supply (15 to 75 modules)

Configuration Settings:

Note: The "●" indicates that the DIP-switch is ON. No indication is provided when the DIP-switch is OFF.

FUNCTION	SWITCH POSITION	ENABLED
X → Y Direction Inhibition	1	●
Y Terminator	2	●
Y → X Direction Inhibition	6	●
X Terminator	7	●

Switch position 8 has no function on the UP307A

LED	MEANING
X side	Flashing: Data Present Steady: Inverted connection or X to Y inhibition enabled
Y side	Flashing: Data Present Steady: Inverted connection or X to Y inhibition enabled
Central	A blink when turned on indicates the presence of voltage

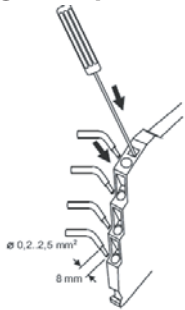
TRANSMISSION SPEED		
3	4	5
		115200
●		57600
	●	38400
●	●	19200
		9600
●	●	4800
	●	2400
●	●	1200

SWITCHING TIME TABLE

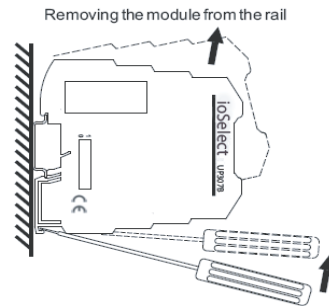
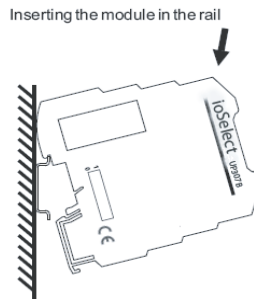
SPEED (bps)	SWITCHING TIME (mS)
115,200	0.13
57,600	0.26
38,400	0.39
19,200	0.78
9600	1.56
4800	3.13
2400	6.25
1200	12.5

Wiring and Installation Diagrams

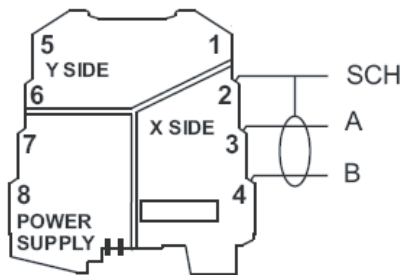
Cage Clamp Connection



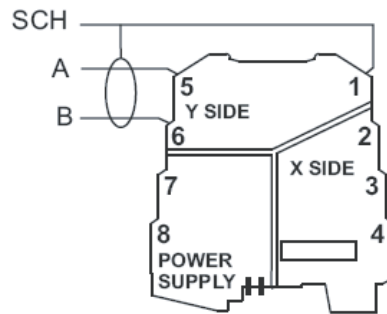
Installation



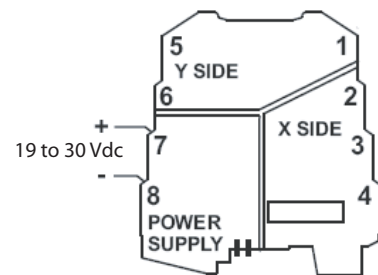
X Side



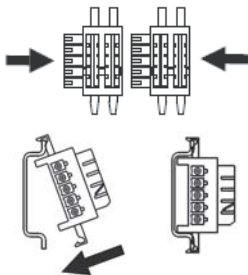
Y Side



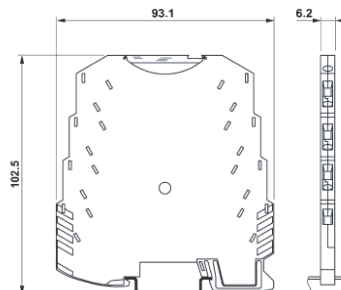
Power Supply



HDBUS Connector



Dimensions (mm)



ioSelect, Incorporated

P: 858-537-2060, F: 800-303-5381, info@ioselect.com

www.ioselect.com

rev: 10/09