

- Connect an RS485 Network to a RS232 serial Port
- Speed selectable from 1200 bps to 115,200 bps
- 1500 Volt Isolation between RS485, RS232 and Power
- Ultra Thin - < 1/4"
- Ultra Low Power ~ 500 mW
- 19.2 to 30 Vdc Power
- DIP Switch Configuration



The UniPak HD Model UP307B is a configurable, DC powered, DIN rail mount RS232 to RS485 converter 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 Conversion made easy from ioSelect, powered by Seneca (K107B).

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	RS232 30 Vdc Protection
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-307B**
IOS-K107B

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

RS232 to RS485 Isolated Serial Converter
RS232 to RS485 Isolated Serial Converter
Din Rail Power Connector (5 dual connectors per package)
Smart Power Supply (15 to 75 modules)

Fax: (800)303-5381

Ph: (877) 3GET IOS (343-8467)

www.ioselect.com
rev: 10/09

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	●
Polarizer for RS232	8	●

When installed, the polarizer prevents the RS232 line from capturing noise when left disconnected

Switch position 7 has no function on the UP307B

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

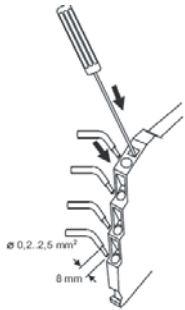
TRANSMISSION SPEED		
3	4	5
		115200
●		57600
	●	38400
●	●	19200
		● 9600
●	●	4800
	●	2400
●	●	1200

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

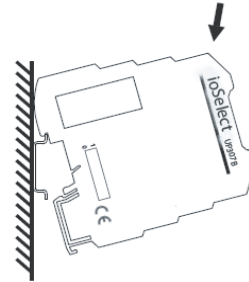
Wiring and Installation Diagrams

Cage Clamp Connection

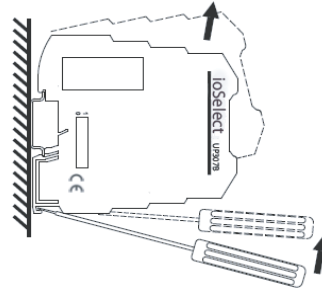


Installation

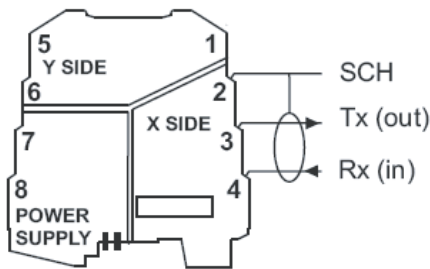
Inserting the module in the rail



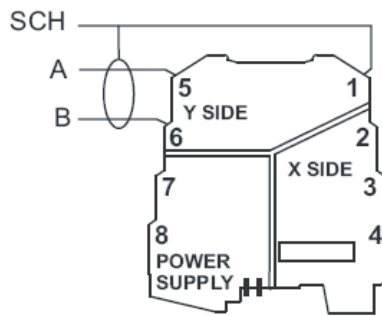
Removing the module from the rail



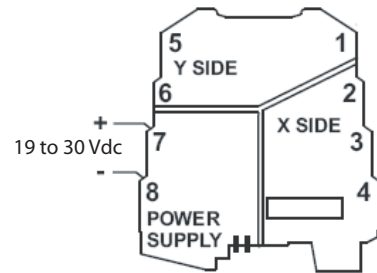
X Side



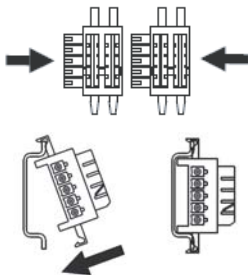
Y Side



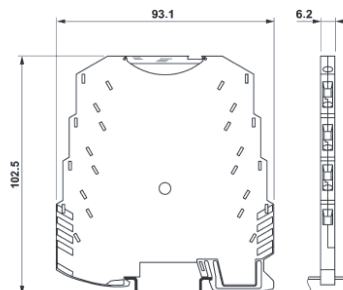
Power Supply



HDBUS Connector



Dimensions (mm)



ioSelect, Incorporated

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rev: 10/09