IPITEK

INTEGRATED PHOTONICS TECHNOLOGY

ISO 9001 Registered

HBR-2502 RS-232/422/485 MODULE
HBR-SCM/HBR-COM

IPITEK FIBER OPTIC DIGITAL TRANSPORT

FEATURES & BENEFITS

- **16 ports independently configurable to RS232, RS422 or RS485 interface**

- **Interface conforming to EIA standards RS232, RS422 and RS485**

- **Point-to-point connections and multi-drop networks**

- **Fully transparent to higher layer protocols**

- **Modular Design**

- **Hot Swappable**
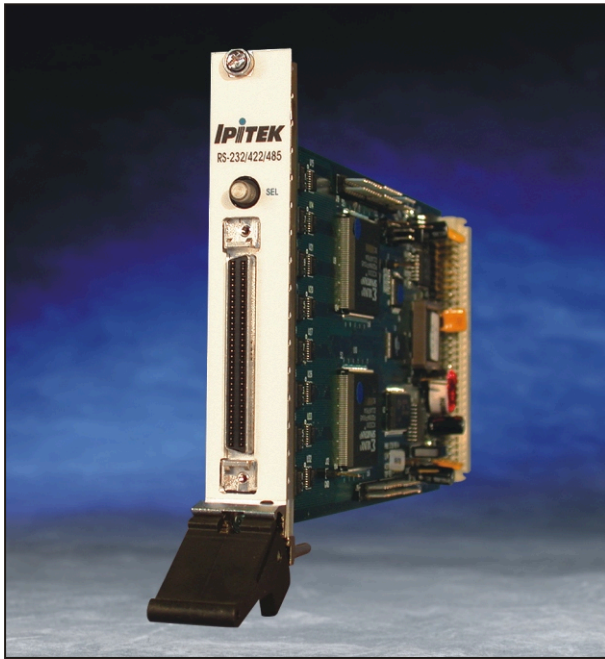
The IPITEK HBR-2502 Serial Communications Module (SCM) transmits and receives up to 16 standards based RS-232/422/485 signals via the HBR-2502 digital transport system. Used with a 16 port external expansion unit, the SCM is independently configurable to any combination of RS-232, RS-422 or RS-485 output formats.

When the unit is configured for RS-232, each port uses four lines, one each for data transmit, data receive, input control and output control. In RS-232 applications requiring additional control lines, a second port can be provided for the additional lines. the Tx and Rx lines of any port may also be configured to handle additional control lines. The input and output control lines can be used for functions such as Request-to-Send (RTS), Clear-to-Send (CTS) or any other control specified in the RS-232 Standard. For operation of a port with RS-422, the lines are configured as standard differential transmit and differential receive pairs. When operating with RS-485, the lines are configured as a bi-directional pair for 2 wire RS-485 or as differential-pair transmit, differential-pair receive for 4 wire RS-485.

The Serial Communications Module is designed for fully transparent transport of signals. There is no requirement to process any information such as data rate, stop bits or parity check. Each port in the module can be configured independently for point-to-point or multi-drop implementation.

The Serial Communications Module is ideal for use in remote terminal connections, pan-tilt-zoom (PTZ) control for remote CCTV cameras, SCADA applications, or a variety of other communication functions which utilize RS-232/422/485 data links. The RS-485 interface is designed to interconnect RS-485 busses over large geographical areas without the use of repeaters. The system is completely transparent to the data and to higher protocol layers. For use in multi-drop applications, a higher level protocol is recommended to avoid collisions caused by simultaneous transmissions from more than one device.

The Serial Communications Module includes non-volatile memory containing module identification and tracking information.
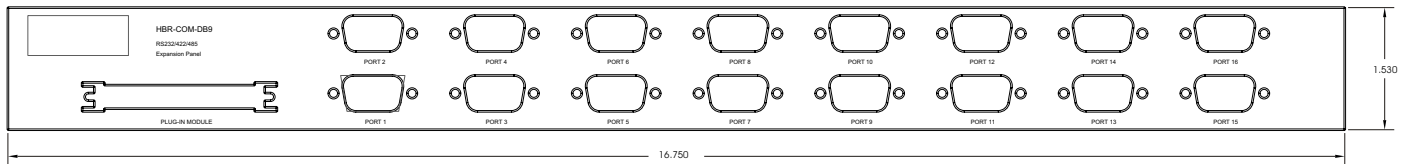
MECHANICAL

5.25"
13.5 cm

1.2"
3.1 cm
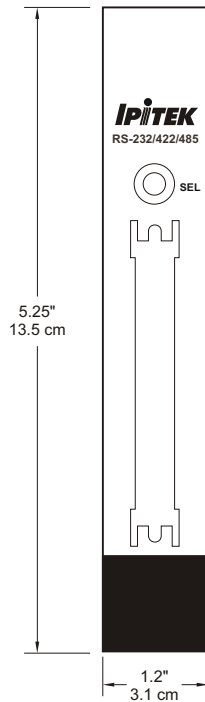
SPECIFICATIONS

Interface:	RS232, RS422, RS485 4-wire, RS-485 2-wire (selectable per port)
Standards:	EIA RS232, EIA-485, EIA-422-A
No. of Ports:	16
Data rate:	DC to 115 Kb/s
Connectors:	16 X DB-9 or RJ-45 through expansion panel

RS-232/422/485 EXPANSION UNIT

HBR-COM-DB9
RS232/422/485
Expansion Panel

PLUG-IN MODULE

PORT 2   PORT 4   PORT 6   PORT 8   PORT 10   PORT 12   PORT 14   PORT 16

PORT 1   PORT 3   PORT 5   PORT 7   PORT 9   PORT 11   PORT 13   PORT 15

1.530

16.750

Shown with DB-9 Connectors

ORDERING INFORMATION

HBR	-	COM	-	XXX
HBR-250X Series Compatible		**Type** RS-232/422/485 Expansion Unit		**Connectors** **DB9** = DB9 connectors **R45** = RJ-45 jacks

HBR	-	SCM
HBR-250X Series Compatible		**Type** RS-232/422/485 Serial Communications Module

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