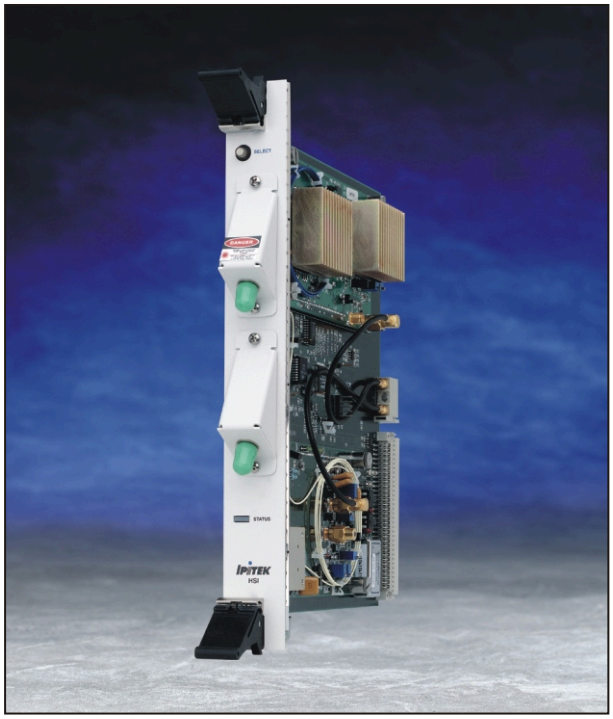
IPITEK
INTEGRATED PHOTONICS TECHNOLOGY
ISO 9001 Registered

HBR-2502 OPTICAL INTERFACE MODULE

HBR-HSI



FEATURES & BENEFITS

- **Multiple Transmitter/Receiver Configurations**
- **Coax Output for Short Haul Applications**
- **Optical Output for Medium/Long Range Applications**
- **Status Monitoring Capabilities**
- **Various Optical & Coax Connector Types Available**
- **ITU Frequency Spaced for DWDM**

The IPITEK® HBR-HSI series of optical modules provide the 2.488 Gb/s interface between HBR-2502 digital transport chassis and the rest of the system. These compact modules plug directly into the HBR-2502 chassis and may be customized to support any of its numerous network applications. These include coax interconnections for co-located HBR chassis, fiber-optic solutions for medium-sized communications networks and ITU grid systems for Dense Wavelength Division Multiplexer (DWDM) applications.

The optics module can be configured to meet the needs of very different systems. The unit contains two open slots that house a transmitter and/or a receiver. The optical transmitters can be ordered at either 1310nm or 1550nm. When used in conjunction with a WDM system, this dramatically increases the amount of information that can be sent over a single fiber.

An optics module may also be configured to act as a repeater or media converter. A signal may be converted from optical to coaxial, or vice versa, by placing both an optical/coaxial receiver and an optical/coaxial transmitter in a single module.

The module is equipped with non-volatile memory that contains module identification and tracking information.

The input/output connectors are located on the front panel of the module and any fiber and/or coax connected to the unit can be routed through dedicated channels in the HBR-2502 to the sides or rear of the unit.

The HBR chassis provides all necessary power, optical cable routing and network management connections.

IPITEK FIBER OPTIC DIGITAL TRANSPORT

SPECIFICATIONS

Optical

Laser Output Power:	0 dBm
Receiver Sensitivity:	-28 dBm
Optical Connector:	FC/PC, FC/APC, SC/PC,SC/APC, E-2000/PC, E-2000/APC
Optical Fiber:	Single mode
Wavelength:	1310 nm or 1550 nm
Transmission Rate:	2.488 Gb/s

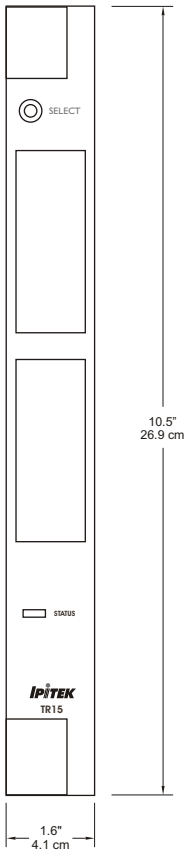
Coaxial

Distance:	10 meters
Connector Type:	BNC, SMA

Environmental

Operating Temperature:	0º to 50º C
Storage Temperature:	-55º to +75ºC, 24 hrs.
Operating Humidity:	to 90%, non-condensing
Dimensions:	10.5"H x 1.6" W x 8.58"D (26.9cm x 4.1cm x 22 cm)

MECHANICAL



ORDERING INSTRUCTIONS

1) The HBR-OPT module can be ordered with one or two daughter cards and can be configured with a single receiver, a single transmitter, or one transmitter ***and*** one receiver.
2) If no receiver is required, specify N for receiver connector.
3) If no transmitter is required, specify N for transmitter connector.
4) Sensitivity, Wavelength and Power are not applicable if ordering a coax receiver or transmitter, or no daughter card has been specified.

ORDERING INFORMATION

HBR - HSI - TFFFFCP - TFFFFCP - X

HBR

Type
High-Speed Interface Module

Daughter Card #1

T = Type (power/sensitivity/dispersion)
0 = None
A = ITU grid Tx, 0dBm, 1800ps/nm
B = ITU grid Tx, 0dBm, 3000ps/nm
C = ITU grid Tx, 0dBm, 5400ps/nm
D = ITU grid Tx, 0dBm, 10,800ps/nm
E = ITU grid Tx, +3dBm, 1800ps/nm
F = ITU grid Tx, +7dBm, 1800ps/nm
G = 1310 nm, 0dBm (uncooled)
H = 1550 nm, 0dBm (uncooled)

FFFF = Transmitter Frequency
FFFF=[ITU freq (GHz)-100,000]/10
0000 = Not Applicable

C = Connector
0 = Not Applicable
1 = FC (optical)
2 = SC (optical)
3 = E2000 (optical)
4 = BNC (coax)
5 = SMA (coax)

P = Polish (Optical Connectors only)
0 = Not Applicable
P = PC (flat polish)
A = APC (angled polish)

Daughter Card #2

T = Type (power/sensitivity/dispersion)
1 = Receiver –28dBm
2 = Receiver –20dBm
3 = Receiver (coax)

FFFF = Transmitter Frequency
0000 = Not Applicable

C = Connector
0 = Not Applicable
1 = FC (optical)
2 = SC (optical)
3 = E2000 (optical)
4 = BNC (coax)
5 = SMA (coax)

P = Polish (Optical Connectors only)
0 = Not Applicable
P = PC (flat polish)
A = APC (angled polish)

Options
0 = None
S = Auto Protection Switching

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