

All optical extenders in a 19" 1RU frame – BR-100



19" 1RU frame, BR-100

- Adopts up to 16 optical extenders
- Supports redundant power for Hot swapping & Load sharing
- Wide wavelength operation from 1330nm to 1510nm
- Transmits signals over 20km
- Status LEDs for signal monitoring

Descriptions

OPTICIS BR-100 19" 1RU frame is a modular and systematic fiber-optic solution providing a variety of optical extenders with the flexibility to handle multi-rate SDI formats such as 3G-SDI(SMPTE-424M), HD-SDI(SMPTE-292M), SD-SDI by 8-channel of CWDM, AES-3id audio compatible with SMPTE 276 and Dolby-E, RS-232/422 and 100Base Ethernet extending all signals over 20km.

All extenders and dual power supply modules are hot-swappable to allow system maintenance without any disruption or disconnection. Each of the various extenders are also available in a compact stand-alone type to be incorporated into any broadcast workflow from small studio and OB vans to master control room.

BR-100 can deploy 1 slot sized extender up to 16 slots and indicates the status of mounted extenders in front panel by LED; LD(Slot ID), PD status, Power and FAN alarm. Dual AC power can be changed by removing the front panel, without cutting off the power to the system. Redundant power is included.

Specifications

- Has 16 slots to adopt various fiber optic extenders
- Dimensions: 430mm x 44mm x 370mm (W x H x D)
- Input power range: 95-240VAC 50-60Hz
- Redundant power supplies for Load sharing and Hot swapping
- Forced air cooling by Fan
- Status indicators
 - Power, FAN error (FAN stop), Slot ID, Signal detections.
- Operation temperature: 0 ~ 50 °C

Adoptable extenders

1) VT-1xx: Transmitter

VR-100: Receiver



1 Slot taken

Multi-rate SDI extender, VT/VR-1xx can handle multi-rate SDI formats such as 3G-SDI (SMPTE-424M), HD-SDI (SMPTE-292M), SD-SDI and DVI-ASI by 8-channel of CWDM. It also provides both Cable equalizer and Clock and Data Recovery features.

- **VT-1xx:** 75Ohm BNC (Input), SC connector (Fiber-optic output)
- **VR-100:** SC connector (Fiber-optic input), 75Ohm BNC (Output)
- **Transmission distance:** Over 20km through single-mode fiber
- **Input power:** 5V • **Bit rate:** Up to 3Gbps (SMPTE 424M)
- **Operation temperature:** 0 ~ 50°C
- **Dimensions:** 20mm x 43.4mm x 110mm (W x H x D)
- **Status indicator:** LD(Slot ID), PD and Power

■ **Ordering information:** where XX refers to 2 digits in wavelength of transmitter,

VT-133: 1330nm DFB-LD
VT-135: 1350nm DFB-LD
VT-137: 1370nm DFB-LD
VT-143: 1430nm DFB-LD
VT-145: 1450nm DFB-LD
VT-147: 1470nm DFB-LD
VT-149: 1490nm DFB-LD
VT-151: 1510nm DFB-LD

2) AT-1xx: Transmitter

AR-100: Receiver



5 Slots taken

AES-3id audio extender, AT/AR-1xx transmits 8-channel of AES-3id signals by CWDM over one (1) fiber.

- **AT-1xx:** 8 x 75Ohm BNC (Input), SC connector (Fiber-optic output)
- **AR-100:** SC connector (Fiber-optic input), 8 x 75Ohm BNC (Output)
- **AES-3id-1995 Standard:** SMPTE 276, Dolby-E compliant
- **Transmission distance:** Over 20km through single-mode fiber
- **Input power:** 5V
- **Operation temperature:** 0 ~ 50°C
- **Dimensions:** 101mm x 43.4mm x 110mm (W x H x D)
- **Status indicator:** LD (Slot ID), Audio channel status SD (Rx) and Power

■ **Ordering information:** where XX refers to 2 digits in wavelength of transmitter,

AT-133: 1330nm DFB-LD
AT-135: 1350nm DFB-LD
AT-137: 1370nm DFB-LD
AT-143: 1430nm DFB-LD
AT-145: 1450nm DFB-LD
AT-147: 1470nm DFB-LD
AT-149: 1490nm DFB-LD
AT-151: 1510nm DFB-LD

3) DX-1 (1330nm LD, 1510nm PD)

DX-2 (1510nm LD, 1330nm PD)



3 Slots taken

RS-422/232 extender, DX-1, 2 transmit and receive RS-422 and RS-232 signals at 10Mbps over one (1) fiber. It is available to convert signals between RS-422 and RS-232 and vice versa.

- **TIA-422 Standard (SMPTE 207M)**
- **Transmission distance:** Over 20km through single-mode fiber
- **Fiber-optic:** SC connector / **RS-422, 232:** D-sub 9-pin
- **Power:** 5V
- **Operation temperature:** 0 ~ 50°C
- **Dimensions:** 60mm x 43.4mm x 110mm (W x H x D)
- **Status indicator:** SD, FX (Optic signal detect), TP (Data signal detect) and Power

■ **Ordering information**

DX-1 (1310nm FP-LD, 1550nm PD)

DX-2 (1550nm FP-LD, 1310nm PD)

**4) EX-1 (1330nm LD, 1510nm PD)
EX-2 (1510nm LD, 1330nm PD)**

Ethernet extender, EX-1, 2 transmit and receive Ethernet (100Base-Tx) signal over one (1) fiber.



2 Slots taken

- IEEE802.3 Standard (100Base-Tx)
- Transmission distance: Over 20km through single-mode fiber
- Fiber-optic: SC connector / Ethernet: RJ-45
- Power: 5V
- Operation temperature: 0 ~ 50°C
- Dimensions: 40mm x 43.4mm x 110mm (W x H x D)
- Status indicator: SD, FX (Optic signal detect), TP (Ethernet signal detect) and Power

■ Ordering information

EX-1 (1310nm FP-LD, 1550nm PD)

EX-2 (1550nm FP-LD, 1310nm PD)

5) WM-81



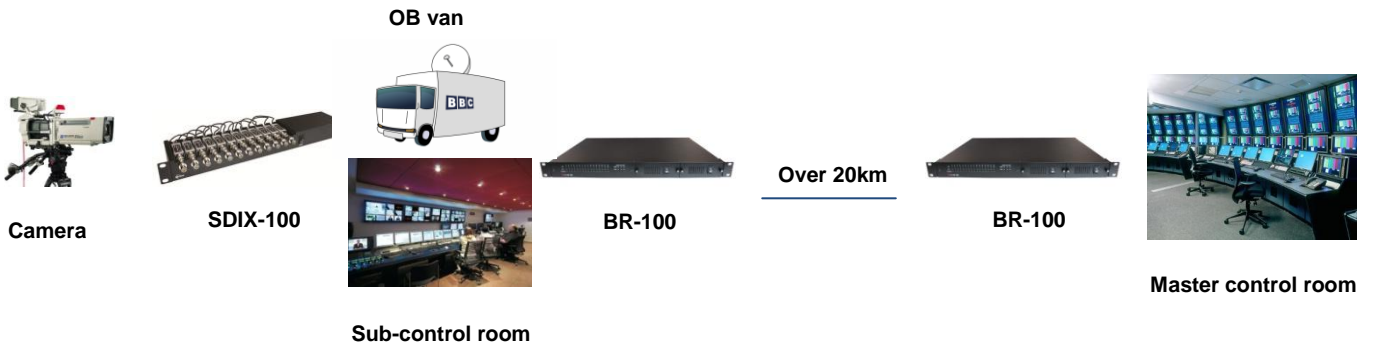
8 Slots taken

Multiplexer/De-multiplexer, WM-81 combines 8-different wavelength fiber-optic signals into 1-fiber and also divides combined signal into 8-different wavelength outputs. User can configure 8 x SDI extenders and WM-81 in one BR-100 to transmit 8 different 3G-SDI signal s over 1 fiber.

It has 1330nm, 1350nm 1370nm, 1430nm, 1450nm, 1470nm, 1490nm and 1510nm in/outlet.

Applications

Between OB Van/ Sub control room and Master control room



Opticis HQ

#304, Byucksan Technopia, 434-6
Sangdaewon-Dong, Chungwon-Ku,
Sungnam City, Gyeonggi-Do, 462-716
South Korea

Tel: +82 (31) 737-8033~8
Fax: +82 (31) 707-8079
www.opticis.com
tosales@opticis.com

