OPTICAL TRANSMISSION SYSTEM FOR SATELLITE SIGNAL

DESCRIPTION
The Fiber-Sync PVFS-T-6V optical transmitter allows for the transport of six wideband RF satellite channels (200-2150 MHz) on one single fiber. FiberSync transmitters employ a series of high grade, replaceable DFB lasers. LEDs indicate the RF input signal is within the proper threshold and AGC amplification ensures consistent performance throughout the entire optical network. The optical transmitter has the capability to support up to 32 Fiber-Sync PVFS-R-6V optical receivers. A typical F port style coaxial connection is used to connect the external power supply allowing for flexible powering options and reducing overall operating temperature of the unit.

FEATURES AND BENEFITS
- Six wideband RF inputs for multi satellite applications
- Single SC/APC output delivers all video via one single mode fiber
- F-port style power connections allows for flexibility in deployment
- Lasers and associated electronics are mounted in replaceable modules to keep operating costs to a minimum
- 6 (200-2150MHz) RF signal inputs. Modulating CWDM 1470-1610 nm DFB lasers
- Stand alone housing with mounting holes
- Laser optical output power: 4dBm
- DC block to all RF inputs

SPECIFICATIONS
(Housing)
Number Of RF Input Port(s):  6  F-type
Number Of Fiber Output Port(s):  1 SC/APC
Power Supply Port(s):  1 F-type each; 20-29Vdc
Dimension L x W x H:  245 x 180 x 60 mm
Power Supply Indicator:  Single Color LED; green LED - on
Optical Power Indicator:  3 Single Color LED; low - red, normal - green, high - red
RF Input Alarm Indicator:  Single Color LED; low - on, normal - off, high - blinking
SPECIFICATIONS (cont'd)

(RF Specifications)
- Frequency Range: 200-2150 MHz
- Impedance: 75 ohm
- RF Input Level: -45 ~ -25 dBm
- Flatness: ±1.5 dB
- CNR: ≥45 dB
- CSO: ≥56 dB
- CTB: ≥60 dB
- IMD: ≥50 dB
- Input Return Loss: ≤-12 dB
- AGC Control: 20 dB
- Total OMI (Optical Modulation Index): 20%

(Optical Specifications)
- Wavelength: 1470-1610 nm, CWDM 1470, 1510, 1530, 1570, 1590, 1610
- Laser Output Power: 4 dBm 1470-1610 nm
- Transmitter Optical Output Power Per Wavelength: 3 dBm 1470-1610 nm
- Center Wavelength @25°C: λ0±3 nm Relative to CWDM DFB, ITU-T G.694.2 IC: 1470, 1510, 1530, 1570, 1590, 1610
- Wavelength Stability: ±6.5 nm Relative to CWDM DFB, operating temperature range from 0°C to 45°C
- Optical Output Return Loss: ≤-45 db

(Power Supply Specifications)
- DC Power Input: F type
- Supply Voltage (Current): 20-29V(1-1.5A)
- Maximum Power Consumption: 30 W

(Environment Specifications)
- Operating Temperature Range: -10~+55 °C
- Storage Temperature Range: -45~+85 °C
- Maximum Relative Humidity: ≤95% - No Condensation

ADDITIONAL INFORMATION
- Power supply not included
- Recommended power supply: PI29R1
- For indoor use only (heated and cooled area of a building)
- Conforms to FCC CFR 47 Part 15 Class A