

7210D 10 MHz Interfacility Link



Figure 1 7210DT Transmitter Panel

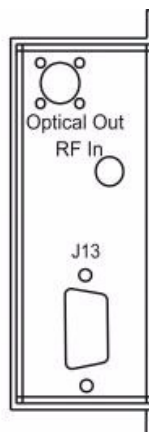
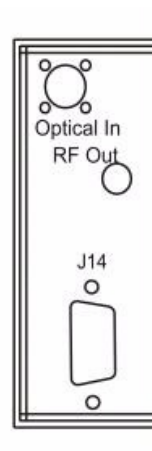


Figure 2 7210D Receiver Panels



The 7210DT is an optical transmitter that receives 10 MHz reference signals from a hub and transmits them to an optical receiver. The *7210D IFL* consists of an optical transmitter (7210DT) that receives signals from satellite modems, video modulators, or exciters and transmits them to an optical receiver (7210DR) via single mode fiber.

The 7210DT and 7210DR modules plug into a 7180M, a 3U chassis and power supply, which enables expansion of the system to accommodate any eight SAT-LIGHT modules.

Manual Gain at the receive site allows for unity gain. The RF signal is directly modulated and adds virtually no phase noise to the original signal. The direct modulation, along with extremely flat amplitude and group delay, guarantees low bit error rate (BER) and high signal quality, independent of distance. The *7210D IFL* is capable of more than 45 dB @ 36 MHz BW carrier to noise performance.

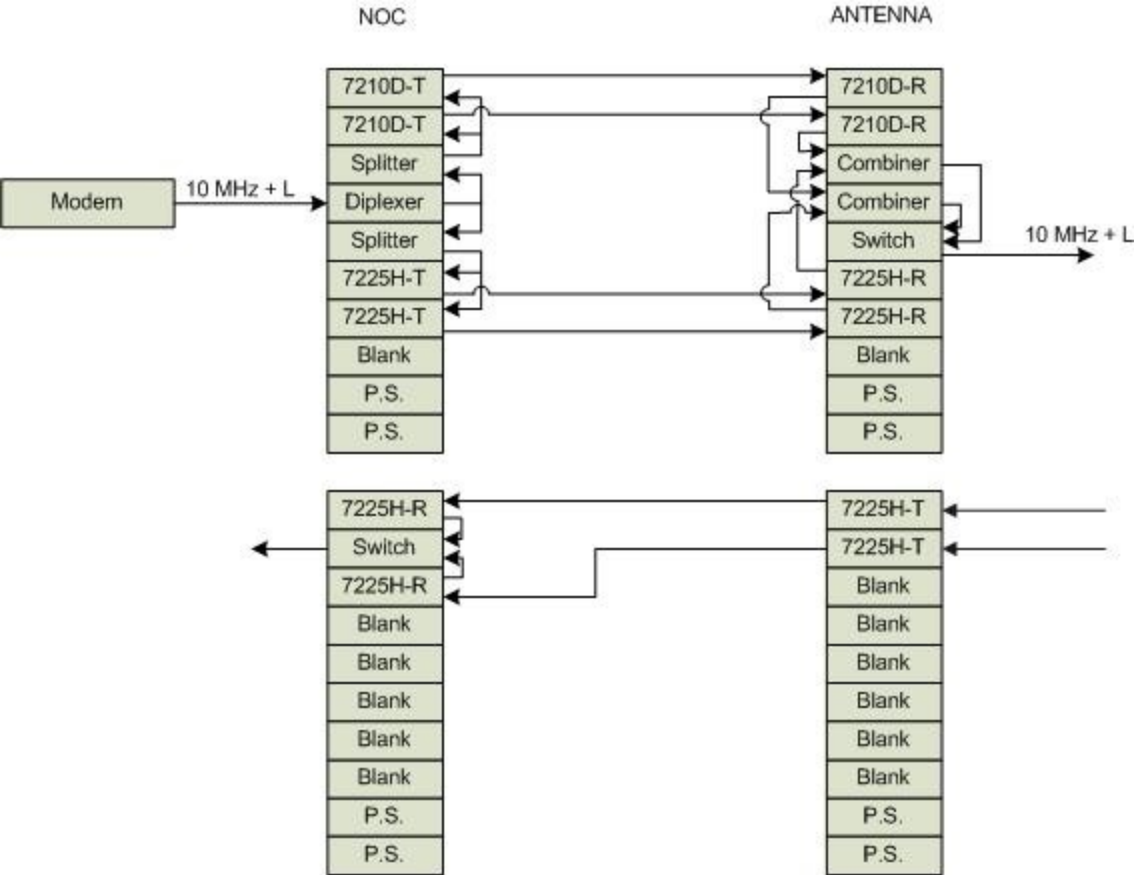
LEDs, and backplane monitors and alarms allow for complete system status monitoring and for interfacing with Monitor and Control (M&C) systems.

7210D IFL Specifications

- **RF Specifications**
 - **Frequency Range** 10 MHz
 - **Noise Figure @ Unity Gain** 28 dB (typical)
 - **Impedance** 75 Ω [50 Ω optional]
 - **VSWR**
 - **Input** 1.3:1
 - **Output** 1.3:1
 - **Input Signal [Single tone]** -5 dBm [max.]
 - **Output Signal [Single tone]** +10 dBm [max.]
 - **Receiver Gain Control** Manual
 - **Receiver RF Connector** BNC 75 Ω
- **Optical Specifications**
 - **Optical Wavelength** 1550 nm
 - **Optical Power Output** +3 dBm/ 2 mW
 - **Optical Connector** FC/APC
 - **Optical Budget/Budget distance** 8 dB / 16 Km
 - **Optical Return Loss** -60 dB
- **Physical Specifications**
 - **Chassis capacity** 8 plug-ins, and 2 power supplies
 - **Chassis size** 19" \times 5.25" \times 7"
 - **Standalone size** 4" \times 4.8" \times 1.3"
 - **Plug-in Unit size** 5.1" \times 4.9" \times 1.6"
- **Power for chassis** 110 or 220 VAC 60 Watts [max.]
- **Power for standalone**
- **Transmitter** +15 VDC @ 200 mA max.(300 mA < 10° C)
- **Receiver** +15 VDC @ 250 mA
- **Operating Temperature Range** -10° C to +55° C
- **Storage Temperature Range** -20° C to +85° C
- All specifications s are subject to change without prior notice



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System example – L-band with 10 MHz reference link