

POLARIZATION-INDEPENDENT SCRAMBLER - PS-700



FiberControl's polarization-independent polarization state scrambler, PS-700, provides high speed scrambling of optical signals with low insertion loss and is independent of the input state-of-polarization. This robust all fiber design provides a wide optical bandwidth, and enables the use of high signal powers, thereby making it suitable for DWDM applications.

Our unique RF-modulated format provides near pseudo-random scrambling as indicated by the broad RF electrical spectral response, unlike other scramblers, whose spectral response reveals well-defined resonances. The high-speed scrambling provides coverage over a large portion of the Poincaré sphere. Fully Patented.

FEATURES:

- Polarization independent
- Broad optical bandwidth
- High optical power throughput
- Low back-reflection, low insertion loss
- Connectorized or fiber input/output
- Instant on (no warm-up)
- Wide temperature range

APPLICATIONS:

- Component level PDL measurements
- Sub-system PDL testing
- Reduce polarization-dependent effects within EDFA optical transmission systems (PDG, PDL)
- Reduce PDL in test-bed measurements of third-party optical equipment



FiberControl
Lightwave Polarization Solutions

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Specifications (Optical, Line Power, Physical):

Optical Input/Output	FC/UPC, FC/APC, or Bare Fiber
Poincaré Sphere Coverage	80% to 95% est. (near pseudo-random)
Degree-of-Polarization	< 5%
Insertion Loss (typ.)	< 0.75 dB
Return Loss	>50 dB, > 55 dB (FC/UPC, FC/APC, or bare fiber)
Operating Wavelength	1300 nm – 1610 nm
Maximum Optical Input ‡	+30 dBm
Scrambling Rate†	4 MHz
PDL (typ.)	<0.05 dB
Residual AM Modulation	<0.5%
Fiber Type	Lucent Technologies, TrueWave™
Operating Temperature	-10°C - +35°C
Electric Input Power	100/120/220/240 ±10% VAC
Line Frequency	50/60 Hz
Power Receptacle	IEC 320
Physical Dimensions	8.9 x 30.5 x 42.5 cm (3 ½" x 12" x 16 ¾ ")
Rack Mount	Standard 18 ½"
Weight	6.58 Kg (14.5 lb.)

Note:

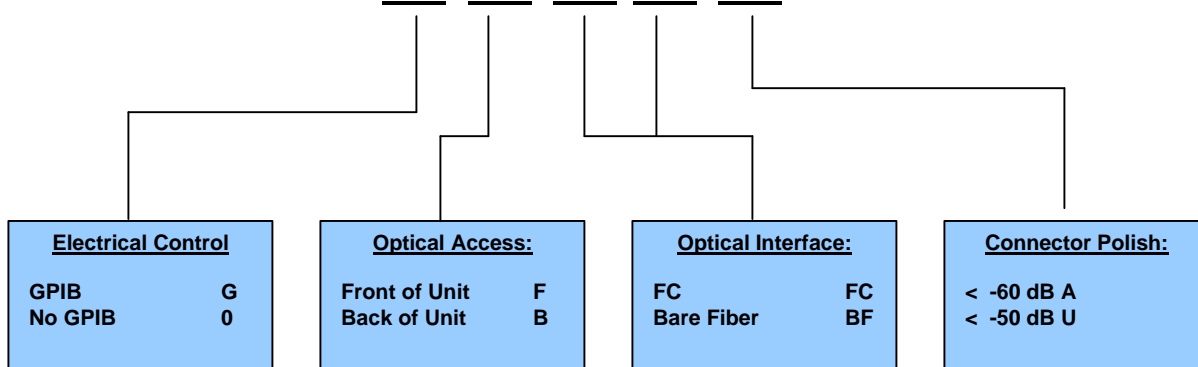
- All measurements @ 1550nm

‡ SRS limit (SBS limit is determined by user's spectral broadening of sources)

† At the -10dB point from near uniform electrical rf spectral distribution

Options:

- GPIB scrambler on/off control
- FC/UPC, FC/APC, or bare fiber
- Access from front or back of unit

PS-700- - - - - PC

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