Precise Time and Frequency,LLC
an LGL Group company

ptf 1211A Optical Fiber Rx/Tx and Distribution

850nm/1310nm multi/single mode fiber

ptf 3207A-TC Master Clock/Optical Transmitter

Up to 20 kilometers !

ptf 1211A Optical Rx/Tx and Time Code Distribution

- **Distribution of many different Time Code signals including IRIG A, B, G, H, NASA 36……**
- **Transmission Distance 20 km**
- **Highly flexible configuration**
- **Multimode or Single Mode**
- **Unique optical encoding**
- **Multiple time codes in one fiber (incl. Count up / down)**
- **Feedthrough for onward transmission**
- **Simple to install and configure**
- **Comprehensive monitor/control**

The *ptf* 1211A optical time code distribution instrument provides a convenient and simple way to transmit multiple time code signals over long distances, without the concerns associated with electrical interference and pick-up.

With a unique optical encoding system developed exclusively by Precise Time and Frequency, *ptf* 1211A accepts optical time code signals from the ptf 3207A-TC Master Clock over distances up to 20 kilometers, and distributes the time codes locally with traditional copper connectivity. Each of the two redundant inputs (Primary and Backup), can accept multiple time code signals to be regenerated locally providing a fully redundant, multiple time code system utilizing just two independent optical fibers for full redundancy.

In the event that all outside communication is lost, the *ptf* 1211A will continue to “flywheel” and provide all time codes locally until connectivity is re-established.

Specifications subject to change without notice

Precise Time and Frequency, LLC, 50L Audubon Road, Wakefield, MA 01880, USA
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Specifications

Optical Inputs

Primary	Multiple Optical Time Codes IRIG B, (opt. A,G, H) NASA 36 Countdown (pseudo IRIG B)
Backup	Multiple Optical Time Codes IRIG B, (opt. A,G, H) NASA 36 Countdown (pseudo IRIG B)
Wavelength	850nm Multimode OR 1310nm Single Mode
Level	-10dBm to -30dBm
Connectors	ST
Monitor	Local input monitor on BNC

Re-Generated Optical Outputs

Encoded	Multiple Optical Time Codes IRIG B, (opt. A,G, H) NASA 36 Countdown (pseudo IRIG B)
Wavelength	850nm Multimode OR/AND 1310nm Single Mode
Level	-14dBm typical
Connectors	ST
Monitor	Local input monitor on BNC

Local Outputs

IRIG B AM	x 4 outputs 1kHz, 3V to 1V pk-pk (3:1)
NASA36 AM	x 4 outputs 1kHz, 3V to 1V pk-pk (3:1)
IRIG B DCLS	x 4 outputs, 100Hz, 3:1 ratio Level, 0V to 5V (TTL), 50 ohms
NASA36 DCLS	x 4 outputs, 100PPS, 3:1 Level, 0V to 5V (TTL), 50 ohms
Pseudo IRIG CD	x 4 outputs
(AM)	1kHz, 3V to 1V p-p (3:1)
Pseudo IRIG CD (DCLS)	x 4 outputs, 100PPS, 3:1 Level, 0V to 5V (TTL), 50 ohms
Optional:	IRIG A,G, H (DCLS) CS 5246 (countdown)

Environmental/Physical

Input Power	
AC	100 VAC to 265 VAC
DC(optional)	20 VDC to 70 VDC
Operating Temp.	-0 to 55 deg. C
Relative Humidity	0-95%(non-cond.)
Dimensions	2U x 19” x 16”
Operating Temp.	0 to 50 deg. C
Relative Humidity	0-95%(non-cond)

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