



Pjs-2000

Portable Synchronization Network Quality Meter



PRODUCT OVERVIEW

The only fully integrated and Rubidium based Synchronization measurement set-up available on the market today.

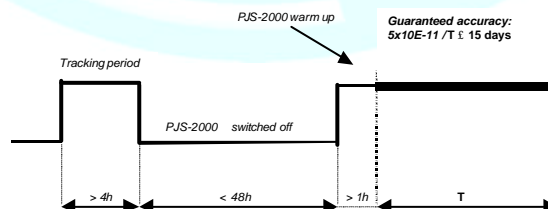
The PJS-2000 is a high precision portable field instrument embedded with a high quality Rubidium oscillator. It is designed for easy installation, operation and maintenance of Synchronization Networks.

The PJS-2000 is composed of three modules :

- **PJ platform** : modular platform based on a PC-VXI central controller with large VGA display.
- **PHM** : Phase Hardware Measurement module includes a high quality internal Rubidium oscillator, a high performance numerical phase comparator and the interfaces.
- **SQM** : Synchronization Quality Meter, GUI (Windows based) stores, analyses and computes the measurements.

MAIN FEATURES

- Best Price-Performance ratio solution
- Portable and modular VXI platform (suitable for measurements)
- Stand-alone equipment
- High quality internal Rubidium oscillator G.812-T (ageing : $5 \cdot 10^{-11}$ /month)
- High performance numerical comparator (10 ps resolution), large pull-in range (>60 UI)
- GUI Multitasking and multiwindowing SQM software (multiple parallel data analysis)
- Retrace function



- External Reference Input for Rubidium accurate locking (ie: GPS, Cesium)
- SSU (or SASE) functions



PHASE MEASUREMENT MODULE

OUTPUTS SIGNALS

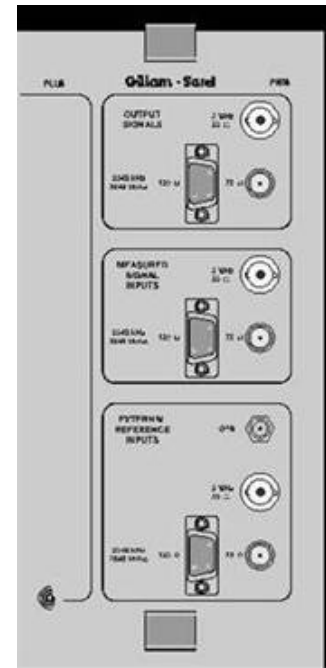
- 2048 kHz (ITU-T G.703/13 ; 75/120 ohms)
- 5 MHz / 10 MHz (50 ohms)
- 2048 kbit/s (ITU-T G.703/9 ; 75/120 ohms) (option)

MEASURED SIGNALS INPUTS

- 2048 kHz (ITU-T G.703/13 ; 75/120 ohms)
- 2048 kbit/s framed/unframed (ITU-T G.703/9)

EXTERNAL REFERENCE INPUTS

- 2048 kHz (ITU-T G.703/13 ; 75/120 ohms)
- 2048 kbit/s framed/unframed (ITU-T G.703/9 ; 75/120 ohms)
- 5 MHz



SYNCHRONIZATION QUALITY METER SOFTWARE

- Runs under Windows
- One full featured application program running on the PJS-2000 to interface the PHM Module :
 - PHM Monitoring / TIE Acquisition / File Viewing and Computing
- One complementary application program running on a desktop PC with file viewing and computing capabilities
- Graphical virtual instrument panel to control PHM Hardware
- Multiple windows user interface to visualize :
 - « Strip chart » (TIE + frequency offset)
 - TIE recorded data files with zooming capability
 - Computed parameters (MTIE, TDEV, ...) with standard mask comparison
- Complete range of computed parameters : TDEV, ADEV, MADEV, MTIE, TIErms
- Complete range of conformance check mask :
 - ITU-T : G.811—G.812—G.812—G.823
 - ETSI : EN 300462-3-1 to EN 300462-5-1 ; DEN/TM 300462-7-1, DEN/TM03067

