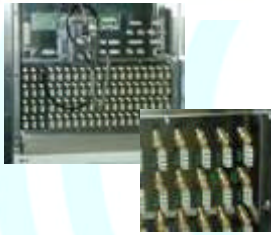




US4G Synchronization Supply Unit (SSU)



PRODUCT OVERVIEW

The US4G is GILLAM's latest state-of-the-art smart Synchronization Supply Unit (SSU) designed to satisfy **Telecom operators** in their multiple Synchronization needs (both wireline & wireless and suitable for all network levels).

The US4G modular and flexible platform has been designed to help Operators to build a reliable network at the lowest cost of ownership, and to allow easy implementation of future features, thus protecting your investments.

The main applications are :

- PRC : Primary Reference Clock for large and small exchanges
- SSU for wireline & wireless central, transit and local exchanges (ITU-T G.812, for SDH, PDH, Mobile & ATM network elements)
- Low cost GPS-based PRC level 1 timing delivery for Mobile Networks.

WHICH SOLUTION?

- Best Price-Performance ratio solution, minimum total cost of ownership
- Fully integrated turnkey synchronization solution
- Oscillator clocks adapted to standards and/or specific customer needs
- Adaptable connectors panels (bi-impedance)
- Modular, flexible and Open platform to future features
- Suitable for SDH, PDH, ATM, Mobile Digital Communication networks
- Exceeds international ITU-T & ETSI standards
- Fully 1+1 protected redundant unit
- Smart unit with distributed CPU-based cards
- Hot swappable cards without service disruption
- Fully remote controlled through LYNX RSNM



REFERENCE INPUTS & FREQUENCY FEEDBACK

- Up to 6 user configurable Input references
- Up to 64 Frequency feedback monitoring inputs
- 2048 kbit/s E1, 2.048 kHz (G.703/9 & G.704, G.703/13), 1/5/10 MHz inputs
- 75, 120 Ohms and high impedance for timing extraction
- Parallel & Continuous Synch Quality monitoring on each input
- MRTIE, TDEV, delta f/f & ITU-T/ETSI masks automatic conformance checking
- Embedded single or dual GPS receiver with antenna and surge protection (G.811 PRC)
- GPC simultaneous tracking of multiple satellite (traceable to UTC)
- SSMB-Synchronization Status Message management on 2048 kbit/s E1

HIGH PERFORMANCE OSCILLATORS

- Best Price-Performance ratio oscillators
- ITU-T G.812 Transit & Local; exceed ITU & ETSI latest industry standards
- High performance 1+1 redundant Rubidium and Quartz clocks range (single/dual)
- Built-in Intelligent DPLL firmware
- False frequency measurements and alarms management
- Jitter and Wander filtering better than ITU-T G.823/G.825
- Locked, holdover (high quality stand-by clock), automatic, manual & majority operating modes

REFERENCE FREQUENCY OUTPUTS

- Up to 128 outputs fully redundant and autonomous
- 2048 kbit/s E1, 2.048 kHz (G.703/9 & G.704 or G.703/13) outputs cards
- 75, 120 Ohms impedances
- Retiming 2048 kbit/s E1 output cards
- Low Phase Noise 5-10 MHz outputs cards (Satellites dedicated applications)
- 1+1 Redundant outputs
- Hitless switching (no phase transients at the outputs)
- Outputs squelching functions
- SSMB-Synchronization Status Message management on 2048 kbit/s E1

LOCAL & REMOTE MANAGEMENT

- Friendly Status visual indicators through US4G Synoptic panel
- Alarm relays contacts : major and minor alarms
- Protected monitoring & control test points
- Local Unit Management RS-232, V24/V28 port
- Local Unit alarm & control with the GUI LYNX Small Synch ® craft terminal
- Fully remote controlled through LYNX RSNM
- Built-in Remote communication port : PSTN, X25 or Ethernet with TCP/IP
- Remote WAN management interface through industry standard SNMP protocol
- Functions : Performance, Fault, Configuration, Accounting and Inventory management
- Firmware upgrades downloadable