



# UNISYNCE

## ENABLING NEXT GENERATION CARRIER NETWORK SYNCHRONIZATION ...

FEI, with a 40-year legacy in precision oscillator technologies and more than 15 years of experience designing and manufacturing SSU's for major international carriers, has created a SSU of unprecedented.

- ◆ Reliability
- ◆ Durability
- ◆ Survivability
- ◆ Adaptability
- ◆ Cost efficiency

### TOTAL SOFTWARE MANAGEMENT

For the first time NO dedicated hardware assemblies, jumpers, or switches are used to configure common telecom signal formats in the UNISync<sub>e</sub> - inbound or outbound.

### REMOTE MANAGEMENT

All software management interfaces are remotely accessible via TCP/IP LAN allowing full utilization of Centralized Network Operations Center (CNO) for monitoring and management.



### Features

It is designed to function as a mini Synchronisation Supply Unit (SSU/BITS) for common clock distribution to all Network Elements (NE's) requiring external timing reference source.

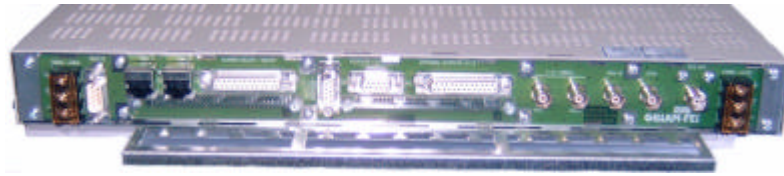
It has been designed to comply with all ETSI, Telcordia and ITU-T G.811 and G.812 international telecom recommendations. It is based on a high performance GPS timing receiver and it can be equipped with additional reference input modules to accept two timing reference signals of various formats and sources. It can accommodate up to 12 output timing sources (two in the basic configuration).

The equipment can also be used for computer time synchronization, thanks to its NTP / SNTP server stratum level 1. "Time of day" and IRIG-B interfaces are also available (IRIG-B interface requires an optional plugging module).

An optional GLONASS + GPS solution is also available (16 channels receiver). This one uses GLONASS and GPS satellites constellation in an integrated way, where all visible satellites belonging to both constellations are used simultaneously to improve clock performance.



# UNI Synce PRODUCT SPECIFICATIONS



## Input

The UniSynce can be equipped with 2 bridged input ports. This requires one plugging module per input. Each external input port is independently software configurable for standard signal frequencies as follows:

- DS-1 1544 kbit/s, Framing selectable—SF or ESF
- E-1 or 2048 kHz
- Optional Composite Clock
- Optional 1/5/10 MHz.

Each input is monitored for LOS, AIS, OOF, and BPV when apply. SSM messages are also monitored when available.

## Oscillator Options

- Standard Quartz ST-3E & Rubidium ST-2
- Optional Stratum 2 High Precision Double Oven Quartz Oscillator (DOCXO) - ST- 2 performance at lower cost

## System Communications Interfaces

- Local craft interface
- TCP / IP Local Area Network interface via RJ-45

## GPS

- Single GPS or optional GPS/GLONASS module
- Integrated GPS receiver
- Optionally, antenna converter allowing to use 300m of RG59 coaxial cable to connect the antenna

## Optional NTP / SNTP Server

SNTP version 4 server Stratum 1 compliant to RFC 2030.

NTP version 3 server Stratum 1 compliant to RFC 1305

## Outputs

Two output ports are available in the base configuration.

One additional plugging module provides 10 more output ports.

Software assignable 2048 kHz, E1

UNISync has also 2 users selectable analog frequency outputs via BNC for 1, 5, 10 MHz and 1 PPS via BNC.

## Environmental

Operating temperature: 0 to 50°C

Humidity: 5 to 95%