2099-24 10MHz, 24V Source/Inserter, Redundant Power

The 2099-24 10 MHz Source/Inserter provides a 10 MHz, ±0.01 ppm oven controlled crystal oscillator (OCXO) with circuitry to insert the 10MHz signal and +24 on two L-band lines for two LNBs. Multi-function switches select +24 VDC LNB power for insertion on either/both LNB lines, internal or External (Option E) 10 MHz, and insertion of 10 MHz on the L-band lines. LEDs indicate DC power (green), Reference insertion (green), alarm (red), remote operation (yellow), and OCXO oven warm-up (yellow). The External Reference option (Option E) provides an external reference input which can be used to lock the internal 10 MHz source to a high stability external frequency reference or it may be inserted directly into the L-band line. Remote control allows remote configuration of front panel commands and monitoring LNB1 and LNB2 voltage and current. Parameter selection and each LNB voltage and current appear on the LCD display. Connectors are BNC female for RF and 10 MHz input and output signals. Redundant AC power is 100-240 ±10% VAC, 47-63 Hz. The chassis is 1 RU, 12” deep.

EQUIPMENT SPECIFICATIONS*

-------- 10 MHz Reference --------

Output Characteristics (on L-band RF)

Level
Harmonics
Level to non-insert end
Input/Output Characteristics (on BNC connectors)

Impedance, Return Loss
Level
Harmonics (Output)

Oscillator

Stability
Aging, per day
Aging, per year
Warm up, 4 minutes
Warm up, 1 hour
Tuning Adjust

Phase Noise @ Freq

-------- L-band Insertion --------

RF Input/Output Characteristics

Frequency
Impedance
Return Loss
Insertion Loss
Frequency Response

LNB1, LNB2 DC Power Characteristics

Voltage/Current
Load Regulation

-------- Chassis / Other --------

Controls, Indicators

INT/EXT 10 MHz Select
10 MHz Insert Select
LNB1, LNB2 Insert
LNB1, LNB2 Volts, Amps
Power, Alarm, Ref.
Oven, Ext Ref, Remote

Other

RF Connectors
10 MHz Connectors
Alarm/Remote Connector
Size
Power, Redundant Std.

*10°C to 40°C; Specifications subject to change without notice