2282-122-21 Redundant Amplifier, 0.95-2.15 GHz, +33 OIP3

The Model 2282-122-21 Redundant Amplifier, 0.95-2.15 GHz, +33 OIP3, monitors and controls internal amplifiers configured in a 1:1 or 1:2 redundant configuration. Variable attenuators can adjust the gain of each amplifier by 30 dB in 0.5±0.5 dB steps by the front panel controls and the M&C. Front panel LEDs indicate power, status (online, standby, alarm), and mode (auto, manual, remote). The amplifiers’ current is measured and a fault is signaled if the current deviates from user selected thresholds. Multi-function switches select Auto, Manual or Remote operation, priorities for 1:2, and the signal path in the Manual mode. Remote operation via the RS232/RS485 M&C interface allows selection of priorities (1:2) and the signal path. Ethernet is available as an option. An LCD display shows each amplifier’s current, and signal path. Form C relay contact closures indicate amplifier and power supply status, switch position, Auto, Remote, and Manual operation. Connectors are type N, female for the RF in and out signals, DB9 for monitor control and auxiliary external contact closure alarm inputs. The 2282-122-21 is housed in a 1RU chassis and is powered by redundant power supplies fed by separate, fused 100-240 ±10% VAC AC input connectors.

Front and Rear Panels (2282-122-21 shown with optional Ethernet)

EQUIPMENT SPECIFICATIONS*

Input Characteristics (RF)
- Impedance/Return Loss 50Ω/12dB
- Frequency 0.95 to 2.15 GHz
- Noise Figure, Max. 10 dB at max gain

Output Characteristics (L-Band)
- Impedance/Return Loss 50Ω/10 dB
- OIP3 +33 min
- Output 1 dB compr. +18 dBm

Channel Characteristics
- Gain, maximum +25 dB ± 1 dB, 0.95 to 2.15 GHz
- Gain, adjustment 30 dB adjustment in 0.5 ± 0.5 dB Steps
- Gain, match 1 dB max difference between primary and backup
- Spurious, 2nd harmonic <55 dBC in band, 0 dBm out, at 1 GHz
- Frequency Response ± 0.25 dB, 40 MHz BW

Controls, Indicators
- Gain, Amp Select direct readout LCD; pushbutton switches or remote
- Status and mode Green, Red, Yellow LEDs
- Remote RS232C/RS485/422, 9600 baud (Ethernet Optional)

Other
- RF In/Out Type N (female), 50Ω
- RF Off line In/Out SMA (female), 50Ω
- Alarm/Remote Conn. DB9 - NO or NC contact closure on Alarm
- Size 19 inch standard chassis 1.75” high X 16.0” deep
- Power 100-240 ± 10% VAC, 47 - 63 Hz, 50 watts max.

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