



4415A

10 MHz Low Noise Reference with Hot Swap Power Supplies

KEY FEATURES

- Low phase noise
- Good Stability Due to Rubidium Oscillator and OCXO
- 6 Sinewave Outputs
- 3 TTL Outputs
- High Channel Isolation
- LED Status Indicators for Oscillator Lock, Internal Fault and Outputs
- Status Information via Ethernet

Symmetricom's 4415A is a 10 MHz low noise source with good stability provided by internal OCXO and Rubidium oscillators. The phase of the outputs can be set by an externally provided 1PPS. Fault sensing includes internal, oscillator and output level. Faults are indicated on front panel LEDs as well as via an Ethernet interface.



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4415A Specifications

ELECTRICAL SPECIFICATIONS

- RF Output (6)
 - Frequency: 10 MHz
 - Output level: 1 to 2 Vpp into 50 ohms
 - Output impedance: 50Ω
 - Isolation: >100 dB
 - Spurious distortion: <-80 dBc
 - Harmonic distortion: <-40 dBc
 - Connectors: BNC female
- TTL Output (3): TTL compatible into 50Ω
- SSB Phase noise (preliminary)
 - 1Hz -115 dBc
 - 10Hz -140 dBc
 - 100Hz -160 dBc
 - 1kHz -168 dBc
 - 10kHz+ -170 dBc
- Stability
 - 100 Seconds: 1 x 10⁻¹²
 - 1 Month: 1 x 10⁻¹¹
- Frequency accuracy (after 24 hrs.): ±1 x 10⁻⁹ per year
- Status
 - Senses signal presence on all outputs
 - Green/Red LEDs on Front Panel
 - LED Indicators for internal fault, osc. fault, outputs and power supplies
 - Network Interface
 - Ethernet 10/100 Base T
 - RJ 45 Connector
 - Protocols: TCP/IP, UDP/IP, ARP, Telnet, DHCP, BOOTP, HTTP and AutoIP

ENVIRONMENTAL & PHYSICAL SPECIFICATIONS

- Temperature: -10°C to 55°C
- Humidity: 0 to 95% non-condensing
- Power requirements
 - [AC Input]: 90 – 264 V AC, 10W, 47 – 63 Hz
 - [DC Input]: 12 – 32 VDC
- Dimensions: 1U (-1.75" / 4.44cm) x 19" (48.26cm) x 12" (30.48cm)
- Weight: 9 lbs. (4.10 Kg)



Rear View



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