RF Generator 8095643 (9505-10)



LabVolt Series

Datasheet



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General Description

The RF Generator contains two independent generators capable of producing a CW or 1 kHz square wave AM modulated RF signal at 915 MHz and 10.5 GHz. Each generator has a push-button switch for turning RF power on and off, a LED that flashes on and off when RF power is turned on, and an SMA output connector. The oscillator in the 915 MHz generator can be tuned from 800 to 1200 MHz via an external tuning voltage input. All outputs are fully protected against short-circuits and misconnections. The RF Generator is self-powered and has a standard unregulated dc power bus to supply power to other compatible modules through its top panel connector. The unit beeps when RF power is turned on to help avoid interference and to warn students in the laboratory that RF power is emitted.

Specifications

| Parameter | Value |
|-----------------------------------|---|
| Power Requirement | |
| Current | 1 A |
| Service Installation | Standard single-phase ac outlet |
| Unregulated DC Output (Power Bus) | +25 V typ. – 1 A max.; -25 V typ. – 1 A max.; +11 V typ. – 1 A max. |
| 1 GHz RF Power Output | |
| Impedance | 50 Ω |
| Power Level | +5 dBm (typical); 0 dBm (minimum) |
| Attenuation at reception | Up to -59 dBm (49 dBm software controlled and 10 dBm with included physical attenuator) |
| 10 GHz RF Power Output | |
| Impedance | 50 Ω |
| Power Level | +12 dBm (typical) |
| Attenuation at reception | Up to -59 dBm (49 dBm software controlled and 10 dBm with included physical attenuator) |
| 1 GHz Tuning Voltage Input | |
| Voltage Range | 0-10 V |
| Frequency Range | 800-1200 MHz |
| Protection | |
| AC Line Input | Circuit breaker |
| Unregulated DC Power Bus | Circuit breaker |
| Physical Characteristics | |
| Dimensions (H x W x D) | 112 x 330 x 300 mm (4.4 x 13.0 x 11.8 in) |
| Net Weight | 6.1 kg (13.4 lb) |

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