R&S®IN600 BIAS UNIT

8.3 kHz to 8 GHz

Power supply for up to two active receiving antennas via signal cable



The R&S®IN600 bias unit is used to supply power to active receiving antennas.

A broadband bias tee is used to feed the antenna supply voltage to the inner conductor of the coaxial cable. The bias tee minimizes insertion loss and prevents both noise and unwanted signals from the power supply from interfering with the RF signals.

AC models are designed for stationary use where mains supply is available. DC models can be battery-supplied and used in vehicles.

The R&S®IN600 is recommended for use with Rohde&Schwarz active receiving antennas.

Model .13 is available for supplying power to the R&S°HFH2-Z2E and R&S°HFH2-Z6E measurement antennas.

Key facts

- ► Extremely wide frequency range
- ► Short-circuit-proof (optical short circuit warning indication)
- ▶ DC and AC models, both featuring a very wide input voltage range
- ► Rack mounting or desktop use
- ► Suitable for vehicle installation





Specifications			
Frequency range	► models .11/.12/.21/.22 ► model .13	8.3 kHz to 8 GHz 8.3 kHz to 30 MHz	
RF connector		N female, 50 Ω	
RF insertion loss	► models .11/.12/.21/.22 ► model .13	< 2.5 dB; 1.5 dB (typ.) (> 20 kHz to 8 GHz) < 0.5 dB; 0.25 dB (typ.)	
VSWR	► models .11/.12/.21/.22 ► model .13	< 3; < 2 (typ.) (20 kHz to 8 GHz) < 1.4; 1.2 (typ.)	
Maximum RF power at antenna port		+20 dBm	
Interference level at receiver port	► models .11/.12/.21/.22	< –110 dBm (typ.) (8.3 kHz to 10 MHz) < –120 dBm (typ.) (> 10 MHz to 8 GHz)	
	► model .13	-105 dBm to -130 dBm (meas.) (8.3 kHz to 1 MHz) < -130 dBm (meas.) (> 1 MHz to 30 MHz)	
Power supply	output voltage	24 V DC ±1 V/–2 V	
	max. current (each antenna port)	500 mA	
	AC supply voltage range (models .11, .12 and .13 only)	100 V to 240 V AC, 50 Hz to 60 Hz/400 Hz	
	DC supply voltage range (models .21 and .22 only)	10 V to 32 V DC	
Operating temperature range		0°C to +50°C	
Storage temperature range		-40°C to +70°C	
MTBF		> 75 000 h	
Dimensions	$W \times H \times L$	approx. $250 \times 55 \times 400 \text{ mm} (10 \times 2 \times 16 \text{ in}), (\frac{1}{2} 19^{\circ}, 1 \text{ HU})$	
Weight		approx. 3 kg (7 lb)	

Ordering information	Туре	Order No.
Bias unit, AC operated, 8.3 kHz to 8 GHz, one antenna port	R&S®IN600	4094.3004.11
Bias unit, AC operated, 8.3 kHz to 8 GHz, two antenna ports	R&S®IN600	4094.3004.12
Bias unit, DC operated, 8.3 kHz to 8 GHz, one antenna port	R&S®IN600	4094.3004.21
Bias unit, DC operated, 8.3 kHz to 8 GHz, two antenna ports	R&S®IN600	4094.3004.22
Bias unit, AC operated, 8.3 kHz to 30 MHz, for R&S®HFH2-Z2E/HFH2-Z6E, one antenna port	R&S®IN600	4094.3004.13
Recommended extras		
19" rack adapter, for mounting two ½ 19" instruments	R&S®ZZA-KN20	1175.3191.00
19" rack adapter, for mounting one ½ 19" instrument	R&S®ZZA-KN21	1175.3204.00

Block diagram



