Data sheet

UHF Power Amplifier R&S®VD 480L

For ground-to-air and naval applications

- High output power
- Continuous operation (100 % duty cycle)
- Automatic AC/DC switch over
- Support of fixed-frequency and ECCM (EPM) systems
- Data operation up to 16 kbit/s for wideband AM/FM
- Power management: normal/high power mode selectable
- Use in 230 V AC or 110 V AC environment (different models available)
- LED service indication
- Graceful power degradation in case of poor VSWR at output
- Automatic switchoff at critical temperature
- High reliability

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Specifications

General data	
Frequency range	225 MHz to 400 MHz
RF gain	
Range	4 dB to 10 dB (factor 2.5 to 10)
Setting	– factory-set via customized EEPROM – user-programmable with R&S®ZT480L
RF output power	nominal maximum[1]
AM carrier	100 W
FM	150 W 200 W
AM PEP (peak envelope power)	400 W 500 W
Unwanted emissions	
Harmonics attenuation	>80 dBc[2]
Spurious attenuation	>80 dBc[2]
Backward intermodulation products (with interfering signal 20 dB below wanted signal)	65 dB below wanted signal
Modulation characteristics	
Classes of emission	AM, FM, other on request
AF bandwidth	depending to exciter
S/N ratio (AM)	>45 dB[2]
AF distortion	<10 %[2]
Power supply	
AC	AC I: 100/110/120 V ±10 %, 50 Hz to 60 Hz AC II: 210/220/230 V ±10 %, 50 Hz to 60 Hz AC range depending on model AC conversion kit: on request
DC	26.5 V ±10 %, operational down to 21.5 V[1]
AC/DC switchover	automatic

Power consumption	
AC, TX mode	1.6 kW/2.2 kVA max.
DC, TX mode	40 A max.
Electrical safety	IP 20, EN 60215, EN 60950-1
Environmental data	
Operating temperature range	–20 °C to +55 °C
Storage temperature range	–40 °C to +70 °C
Max. relative humidity, operation	95 % at +40 °C (without condensation)
Max. relative humidity, storage	95 % at +40 °C
Permissible altitude, operation	3000 m above sea level
Permissible altitude, storage/transport	5000 m above sea level
Shock	30 g for 6 ms, 3 shocks in 3 positions
Vibration	0.3 mm double amplitude, 10 Hz to 55 Hz, total test period 30 min.
Mechanical data	
Dimensions (W × H × D)	483 mm × 265 mm × 471 mm, 19" 6 HU plug-in
Weight	approx. 55 kg

Ordering information

Designation	Type	Order No.
UHF Power Amplifier (19" 6 HU plug-in, delivered with AC mains cable, DC cable socket, fuses etc)	R&S®VD480L	6032.0504.xx xx = 22 (230 V etc, without bypass relay) xx = 23 (230 V etc, RF bypass dual relay) xx = 32 (110 V etc, without bypass relay) xx = 33 (110 V etc, RF bypass dual relay)
Programmer	R&S®ZT480L	6043.5948.02 STTE: special-type test equipment for reprogramming of the EEPROM for optimum operation, e.g. after repair work or in connection with non-Rohde&Schwarz exciters

[1] With reduced specifications.
[2] Ref. to AM (m = 0.85; f_m = 1 kHz) and nominal supply voltage. In addition the exciter values are applicable.

More information at
www.rohde-schwarz.com
(search term: VD480L)

Certified Quality System ISO 9001 DQS REG. NO 1954 QM
Certified Environmental System ISO 14001 DQS REG. NO 1954 UM
Certified Quality System AS 9100 DQS REG. NO 1954 AS
Certified Quality System AQAP-110 Audit report GP Q2-NO 96.07

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