

Specifications

Specifications common to R&S NM/NW7001

Frequency range	170 MHz to 250 MHz
Power supply	3 x 400 V AC +/-10%, three-phase operation
Max. installation altitude	2000 m above sea level (>2000 m on request)
Operating temperature range	+4°C to +45°C
Permissible relative air humidity	95%, non condensing
Dimensions (W x H x D) in mm	582 x 2034 x 800
RF connectors	1 5/8 EIA

Inputs	
Analog	2 x video (BNC, 75 Ω) 2 x sound (XLR, 3-contact)
DVB-T	2 x ASI (in pairs)
ATSC	2 x SMPTE-310 (BNC, 75 Ω)

Interfaces	
RS-232	at the front, operation of transmitter by means of graphical user interface (GUI) from PC, sub-D, female, 9-contact
RS-485	for remote control of transmitter, at transmitter top, sub-D, female, 9-contact
RS-232	for remote control of transmitter, at transmitter top, sub-D, female, 9-contact (connection of Hayes-compatible modem)

Optional	parallel remote-control interface, floating, for messages and commands; SNMP interface or/and TCP/IP-WEB server
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Specification R&S NM7001 (Analog TV)

	R&S NM 7005	R&S NM 7010	R&S NM 7015	R&S NM 7020
RF output power	500 W	1 kW	1.5 kW	2 kW
RF power of plug-in modules	1 x 500 W	2 x 500 W	3 x 500 W	4 x 500 W
Number of power supplies	1	2	3	4
Air throughput	20 m ³ /min			
Reference frequency	1 MHz, 5 MHz or 10 MHz, 0.1 V to 5 V (V _{pp}) or TTL, BNC			

TV standards	B, G, D, K, M, N, I
Colour transmission	PAL, NTSC, SECAM
Sound transmission	two-tone coding to IRT or FM single sound and NICAM728 (-13 dB / -20 dB) or FM single sound (-10 dB)

Specification R&S NW7001 (DVB-T/ATSC)

	R&S NW 7021	R&S NW 7041	R&S NW 7061	R&S NW 7081
RF output power DVB-T	200 W	400 W	600 W	800 W
RF output power ATSC	300 W	600 W	800 W	1200 W
RF power of plug-in modules	1 x 200 W/300 W	2 x 200 W/300 W	3 x 200 W/300 W	4 x 200 W/300 W
Number of power supplies	1	2	3	4
Air throughput	20 m ³ /min			
Reference frequency	1 MHz, 5 MHz or 10 MHz, 0.1 V to 5 V (V _{pp}) or TTL, BNC			
Reference pulse	1 Hz, TTL, BNC			

DVB-T	
Coding and modulation according to EN 300744	
IFFT mode	2 k and 8 k
Useful symbol period	224 μs (2 k) or 896 μs (8 k)
Modulation	QPSK, 16QAM or 64QAM
Guard interval	1/4, 1/8, 1/16 or 1/32 of useful symbol period
Inner code rate	1/2, 2/3, 3/4, 5/6 or 7/8

ATSC	
according to Doc. A53/1995	
Modulation	8VSB
Symbol rate	10.76 MHz
Data rate	19.39 Mbit/s
Trellis coding	2/3
Reed-Solomon encoder	207/187/10