



VHF Stereo Transmitter NU002-CM

High-quality modulator with integrated stereocoder

VHF Stereo Transmitter CM which is part of the versatile NU002 plug-in system from Rohde&Schwarz is a stereocoder/modulator to CCIR recommendations for the frequency range from 87.5 to 108 MHz.

The high-quality integrated *stereocoder* features high harmonics suppression and excellent channel separation. A front-panel connector allows non-re-

active feed-in of additional signals in the frequency range from 53 kHz to about 100 kHz (eg RDS, traffic radio or SCA). A pilot-carrier output is available for the in-phase frequency coupling of the subcarriers.

The following *FM modulator* derives the RF output signal from the extended MPX signal. The low-noise VCO is synthesizer-controlled. Its frequency can

be altered by simply setting some coding switches without any filter readjustment being required. The lowpass-filtered RF output signal is held at a constant level.

Monitoring circuits block the RF output signal if the synthesizer is out of lock or in the event of level errors in the RF path. An error message is output at a floating contact.



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Specifications

Frequency range Tuning	87.5 to 108 MHz BCD switches in steps of 10 MHz, 1 MHz, 100 kHz and 10 kHz
Tuning error AFC	±2 kHz synthesizer with PLL, microprocessor- controlled
Class of emission	F3E
Output power	adjustable +6 to +12 dBm
RF output	SMA female, 50 Ω
Test output	N-type female, 50 Ω, 25 dB below level at RF output
Return loss	>20 dB, typ. 25 dB
Harmonic suppression	>60 dB
S/N ratio relative to 100% AM, weighted	>50 dB
Frequency stability (deviation from nominal frequency after 24 hrs at 25°C)	±2 kHz
Temperature effect	±2 kHz
AF inputs (L/R)	
Input level for 40-kHz deviation	±6 to 9 dBm (internal selection)
Input impedance	600 Ω or 12 kΩ, balanced/unbal- anced (internal selection)
Connectors	Lemo Triax female
Preemphasis	50 or 75 μs (internal selection)
Frequency response	
40 Hz to 15 kHz relative to 500 Hz	±0.5 dB
Crosstalk between left and right channel	
40 Hz to 100 Hz	≥38 dB (typ. 40 dB)
100 Hz to 15 kHz	≥50 dB (typ. 54 dB)
Harmonic distortion 40 Hz to 5 kHz for ±40-kHz deviation	≤0.2% (typ. 0.1%)
±75-kHz deviation	≤0.3%

Difference-frequency distortion (40 Hz to 15 kHz for ±75-kHz deviation)	d ₂ d ₃	≥60 dB (typ. 63 dB) ≥56 dB (typ. 62 dB)
Weighted S/N ratio for f _{mod} =500 Hz, ±40-kHz dev., CCIR weighting		≥66 dB (typ. 69 dB)
Unweighted S/N ratio		≥70 dB (typ. 74 dB)
Indicators		for RF level and synthesizer AF level (left/right), deviation and RF level
Settings (accessible externally)		

**RDS/Traffic Radio input and
pilot output**
Connectors

only for model .03
BNC female

General data

Rated temperature range 0 to +40 °C
Operating temperature range -5 to +45 °C
Storage temperature range -40 to +70 °C
Power supply 230 V -10%/+15%, 47 to 63 Hz
(8 VA / 5 W)

Dimensions (W x H x D); weight
with power supply
without power supply

38 mm x 208 mm x 502 mm; 2.1 kg
38 mm x 208 mm x 377 mm; 1.6 kg

Ordering information



VHF Stereo Transmitter
with power supply
without power supply

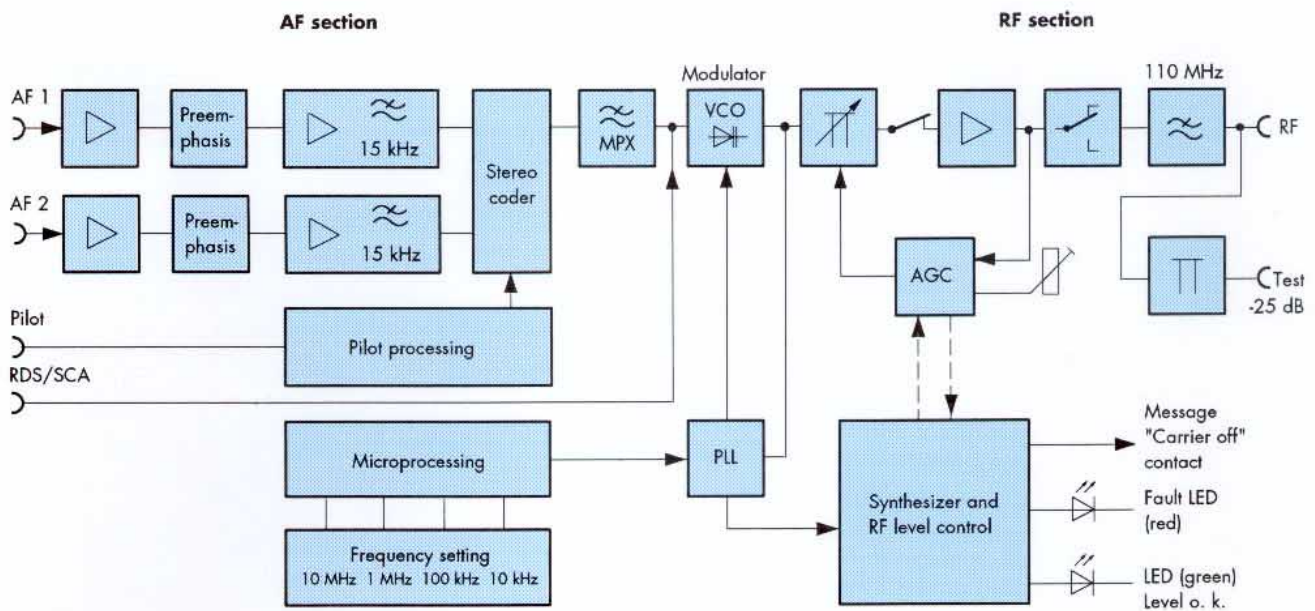
NU002-CM

2020.3508.02
/.03 with RDS
2020.3550.02
/.03 with RDS

Power Supply (separate)
(2 x 400 mA)

NU002-B

2020.3008.02



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