



VHF /AM Transceiver Base Station

TG660 (with GT6201) ATC



The TG660 is a new VHF Multichannel Transceiver Base Station for Ground to Air Communications at Airfields, Airports, Airlines and Control Centres, using the latest digital signal processing and Radio over IP (RoIP) technologies. The newly certified GT6201 remote controlled transceiver platform is embedded within the TG660 base station and is fully compliant with the 8.33 kHz channel spacing requirements. The TG660 is available with 6 W, 10 W, 25 W and 50 W output power.

General features:

- Frequency range: 118 - 137 MHz
- 8.33 kHz and 25 kHz channel spacing
- Local and Remote control operation
- Digital Signal Processing
- Built in Test (Bite)
- Balanced Audio Interface
- Isolated PTT and SQUELCH control
- Balanced Voice Recording Output

Available versions:

- TG660-05 (Art. No. 0635.367-926)
- TG660-10 (Art. No. 0635.375-926)
- **TG660-25 (Art. No. 0654.132-926)**
- TG660-50 (Art. No. 0649.252-926)

Options:

- Built in battery for emergency operation (Art. No. 0640.131-958) - only for 6 W & 10 W versions
- RoIP (VoIP) Interface incl. Remote Monitoring & Control via Webinterface (Art. No. 0640.141-958)

VHF /AM Transceiver

TG660 ATC

General data:

- Frequency range: 118,000 MHz-136,980 MHz
- Channel spacing: 25 kHz / 8.33 kHz, automatically selected
- Modulation type: AM, A3EJN
- AC-Power: 90 VAC 250 VAC, 45 Hz ..65 Hz
- DC-Power external: Nominal: 24 VDC ..35 VDC
Range: 21 VDC...31 VDC
- RF Antenna connection: N-Connector female
- Warm up time: 5 sec.
- Duty cycle: RX/TX: 4 : 1
- Voice recorder output: -6 dBm, +3 / -12 dB @ 600 Ω , balanced
- Environmental data:

Temperature range: Operating -20°C ... 55°C
Storage -55°C ... 85°C
Humidity: 48h, 50°C, 95% RH, without condensation
- Dimensions (WxDxH):
Case: 428 x 350 x 86,5 mm
19" Unit: 482,6 x 350 x 88,1 mm
- Weight: 4,5 kg w/o battery (5W & 10W)
7.0 kg w/ PA (25W & 50W)

Transmitter data:

- Carrier power: 6 W , 10 W , 25 W or 50 W
- Frequency stability: ± 1 ppm
- Protection of the transmitter: VSWR = 6 without any damage
- Modulation depth: 85% m 95%
- Modulation distortion: 10%
- AF-Response: 350 Hz .. 2500 Hz (8.33 kHz)
2 dB $\geq$ ripple $\geq$ -4 dB, reference 0 dB @ 1 kHz
- Adjacent channel power: 50 dB (8.33 kHz),
60 dB (25 kHz)
- AF-Line input level: -20 dBm to 10 dBm adjustable
- AF-Line input impedance: 600 Ω +/- 10%, balanced
- Locale Mike sensitivity (Dyn.): 2 mV to 10 mV @ 200 Ω , balanced

Receiver data:

- Sensitivity (Mod. Depth 30%): -101 dBm for 12 dB SINAD
- Effective bandwidth: ≥ 2.8 kHz for 8.33 kHz Channel
 ≥ 8.5 kHz for 25 kHz Channel
- AF-Response: 350 Hz.....2500 Hz (8.33 kHz)
2 dB $\geq$ ripple $\geq$ -4 dB, refer. 0 dB @ 1kHz
350 Hz3400 Hz (25 kHz)
2 dB $\geq$ ripple $\geq$ -4 dB, refer. 0 dB @ 1kHz
- Adjacent channel rejection: ≥ 60 dB
- Spurious response rejection: ≥ 70 dB
- Intermodulation response rejection: ≥ 70 dB
- Blocking or desensitisation: ≥ 80 dB
- Cross modulation rejection: ≥ 80 dB
- Squelch operation: 6 dB S+N/N 12 dB, software adjustable
Override level -85 dBm
- Audio noise: ≥ 40 dB S+N/N @ -13 dBm
- RF-Input level range: -101 dBm RFlevel 10 dBm
- RF-Dynamic range: 6 dB AF variation for 100 dB RF variation
AF-Level variation 1.5 dB
- AF-AGC for 30% m 90%: -20 dBm to 10 dBm, adjustable with internal potentiometer
- AF-Line output level: 600 Ω +/- 10%, balanced
- AF-Line output impedance: ≥ 100 mW @ 600 Ohm, unbalanced, Volume control at the front panel
- Local headphone output power: ≥ 4 W sinus @ 4 Ω , Volume Control at the front panel
- Ext./Int. speaker power: ≥ 4 W sinus @ 4 Ω , Volume Control at the front panel

Type approval (GT6201) :

- BAF (Federal Supervisory Office for Air Navigation Services), Germany: D-0030/2014
- Italy: 0041697- 02.07.2014

Type approval (TG660) :

- FCC (Federal Communications Commission), USA: FCC ID: 2AHX9TG660