VHF/AM Transceiver Base Station

TG660 (with GT6201)

ATC

The TG660 is a new VHF Multichannel Transceiver Base Stadion 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, available with 6W and 10W carrier output power, is embedded within the TG660 base station and is fully compliant with the 8.33 kHz channel spacing requirements.

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 with GT6201-05-R (Art. No. 0635.367-926)

- TG660-10 with GT6201-10-R (Art. No. 0635.375-926)

Options:

-Built in battery for emergency operation (Art. No. 0640.131-958)
-RoIP (VoIP) Interface (Art. No. 0640.141-958)

Contact us · Tel. +49 (0) 7229-305-0 · info@becker-avionics.com · www.becker-avionics.com

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General data:

- Frequency range: 118,000 MHz-136,9916 MHz
- Channel spacing: 25 kHz / 8.33 kHz, automatically selected
- Modulation type: AM, A3EJN
- AC-Power: 9 90 VAC .... 250 VAC, 45 Hz .... 65 Hz
- DC-Power external: Nominal: 24 VDC .... 35 VDC Range: 21 V DC...31 V DC
- 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: ~7,0 kg

Transmitter data:

Carrier power: 6 W or 10 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 ≥ ripple ≥ -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 ≥ ripple ≥ -4 dB, reference 0 dB @ 1kHz 350 Hz .... 3400 Hz (25 kHz) 2 dB ≥ ripple ≥ -4 dB, reference 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-AGC for 30% m 90%: AF-Level variation 1.5 dB
- AF-Line output level: -20 dBm to 10 dBm, adjustable with internal potentiometer
- AF-Line output impedance: 600 Ω +/- 10%, balanced
- Local headphone output power: ≥ 100 mW @ 600 Ohm, unbalanced, Volume control at the front panel
- Ext./Int. speaker power: ≥ 4 W sinus @ 4 Ω, Volume Control at the front panel

Type approvals (GT6201) :
- BAF (Federal Supervisory Office for Air Navigation Services), Germany: D-0030/2014
- Italy: 0041697– 02.07.2014

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