



VHF Single Channel Receiver

RS560

ATC/Communication



RS560, VHF-AM receiver for ATC applications

The RS560 VHF-AM receiver is designed for applications in ATC environment like control centers, airports and for Airline company operations.

The RS560 receiver operates in AM-mode in the frequency range from 118.000 MHz to 136.9917 MHz, 25 KHz and 8,33 KHz channel spacing.

Interfaces for line out (0dbm @ 600 Ohms) recording output, loudspeaker output and AGC control voltage output as well as a squelch contact are available.

Control inputs are available for remote on/off, squelch on/off and muting.

The RS560 receiver is fully synthesized, change of frequency will be made by using a PC or via the remote control interface. No other adjustment is required.

8 units of RS560 can be carried by a 19" 3HU sub-rack to replace the older BECKER RG 3910 models.

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Technical data:

Single Channel Receiver

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|------------------------|-------------------------------|
| Mechanical Dimensions: | 19" sub plug in unit, |
| Hight: | 3 HU, 132 mm |
| Wide: | 10 HP, 50,8 mm |
| Depht: | 300 mm, up to 350 mm possible |

Electrical Characteristics:

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|-------------------------------------|---|
| Frequency range: | 118.000 MHz to 136,9917 MHz |
| Operating mode: | AM, Mode A3E |
| Frequency stability: | ≤ 1 ppm (0° C to 50° C) |
| Channel spacing: | 25 KHz and 8,33 KHz |
| Operating Voltage: | 24 V DC, 21 to 31 V |
| Sensitivity: | - 101 dBm, 2 µV for 10 dB SINAD |
| Harmonic distortion: | ≤5% (1KHz 30% mod.), ≤10% (1KHz 90% mod.), |
| AF-Bandpass: | 25 KHz > 300 – 3400 Hz, - 3 dB, ref. 1KHz 8,33 KHz > 300 – 2500 Hz, - 3dB, ref. 1KHz |
| RF Bandpass at 6 dB: | 25 KHz > ± 8,5 KHz 8,33 KHz > ± 2,8 KHz |
| Adjacent channel rejection: | > 60 dB |
| Intermodulation response rejection: | > 70 dB |
| Blocking or Desensitization: | > 80 dB |
| Crossmodulation: | ≥ 80 dB |
| Squelch operation: | Attenuation > 60 dB Squelch operation switchable on-off |
| RF dynamic (100dB): | < 6 dB AF variation |
| AF AGC: | < 1,5 dB (30...90% mod.) |

AF-Outputs:

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|------------------|--|
| AF-Line output: | Level 0 dBm, adjustable - 15 to + 10 dBm Impedance 600 Ohms, balanced with center tap |
| Recorder output: | Level - 6 dBm, adjustable -15 to 0 dBm @600Ω, Impedance 600 Ohms, balanced |

| | |
|-----------------------------|---|
| AF-AUX-Output: | 0,5 V @ 1 K Ohm, for monitoring purposes |
| Control-Outputs: | |
| Squelch information: | dry relay contact, relay selectable to center tap by jumper |
| RX-OK info: | contact to ground (open collector) |
| AGC-Output: | DC analogue |
| Headset output: | Location Frontpanel, ≥ 20 mW@ 600 Ohm |
| Loudspeaker: | can be connected extern |
| Control Inputs: | |
| Remote On: | Switch to Gnd, Gnd = On |
| Remote-Local-Selector: | + 5 to 12 V DC, switched to ground for remote |
| Muting input: | + 5 to 12 V DC, switched to ground for muting |
| Controls: | |
| Switch SQL on-off: | Push button front panel or via Remote control |
| Volume control: | Potentiometer, Front panel |
| Interface: | RS422 for service purpose and remote control |
| Indications: | Power On LED RX On LED Sql LED RX ok LED, Dual colour, green ok, Red Error |
| Climatic conditions: | |
| Operating temp. range: | - 20°C to + 55°C |
| Storage temp.: | - 40°C to + 80°C |
| Humidity: | 95% at +40°C without condensation |
| Standards: | ETSI EN 300676 |