

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

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:

Frequency range: 118.000 MHz to 136,9917 MHz

Operating mode: AM, Mode A3E

Frequency stability: $\leq 1 \text{ ppm } (0^{\circ} \text{ C to } 50^{\circ} \text{ C})$

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, -3 dB, ref. 1 KHz

RF Bandpass at 6 dB: $25 \text{ KHz} > \pm 8,5 \text{ KHz}$

 $8,33 \text{ KHz} > \pm 2,8 \text{ KHz}$

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:

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

 $@600\Omega$, 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

Authorized Partner



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