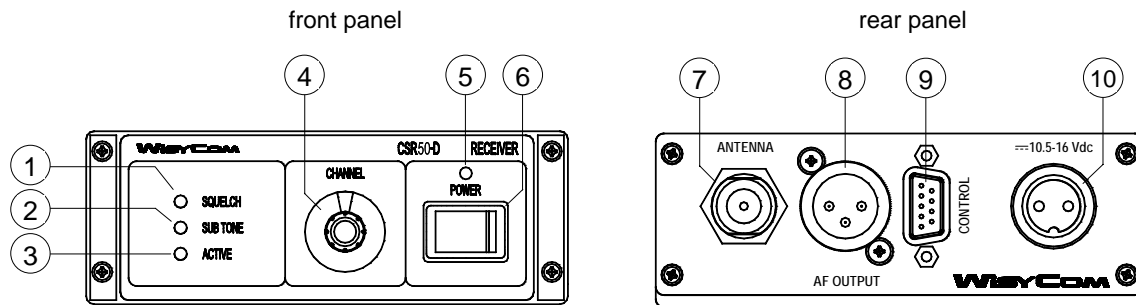


**WIRELESS-COMMUNICATION SYSTEMS**  
**CSR 50-D - UHF RECEIVER MODULE**  
for "desktop" & "in 19"/1U rack" use



- 1) LED INDICATION: SIGNAL SQUELCH (green Led).  
Green Led is on when a signal is correctly received.
- 2) LED INDICATION: PILOT-TONE SQUELCH (yellow Led).  
Yellow Led is on when the correct sub-audio pilot-tone is present on the received signal.
- 3) LED INDICATION: ACTIVE RECEIVER (red Led).  
Red Led is on when the receiver is feeding the audio output line.  
(Red Led is present only on the CRS 50-DY model, pre-set for remote diversity receiving).
- 4) CHANNEL SWITCH ( $0 \div F$ ).
- 5) LED INDICATION: APPARATUS ON (red LED).
- 6) ON / OFF SWITCH (**Power**).
- 7) CONNECTOR: ANTENNA (type N female).
- 8) CONNECTOR: AUDIO SIGNAL OUTPUT (type XLR3-M).  
The audio signal output is transformer-balanced and floating.
  - pin 1 = ground
  - pin 2 = output AF-a
  - pin 3 = output AF-b.
- 9) CONNECTOR: DIVERSITY-CONTROL INPUT/OUTPUT LINE (D15-F type connector - optional).  
The diversity control line is opto-isolated and floating. • pin 4 = ground; • pin 5 = DY-I/O-a; • pin 9 = DY-I/O-b.  
The working area of the communication system is increased through the use of two or more CSR50-DY receivers (with built-in DYB50 diversity board). These receivers can be installed in different locations and connected together to operate in diversity mode. In this case the diversity control line of each receiver has to be connected in parallel with the one of all receivers, keeping the same phase. Obviously, the frequency of all receivers working in diversity mode must be the same. If the diversity control line is kept isolated, the CSR50-DY receiver module can operate normally in not-diversity mode.
- 10) CONNECTOR: DC POWER INPUT (10.5 ÷ 16 Vdc)

**CSR 50-D - UHF RECEIVER MODULE, for “desktop” & “in 19”/1U rack” use  
FOR WIRELESS-COMMUNICATION SYSTEMS****TECHNICAL SPECIFICATIONS:**

- Switchable channels : 16, preset in the 400 ÷ 550 MHz range (others on request).
- Switching-range : 7 MHz (others on request).
- Frequencies : microprocessor controlled frequency synthesizer circuit, with 5 and/or 6.25 KHz minimum step. They are easily user-reprogrammable by PC and optional “UPK100 Programming kit”.
- Channel spacing : 12.5 or 20 or 25 or 50 KHz [1].
- Frequency error : < ± 2 ppm, in the rated temperature range.
- Temperature range : -10 ÷ +55 °C.
- RF input impedance : 50 ohm (type N connector).
- Spurious emissions : < 2 nW.
- Modulation : FM (nominal deviation = ±1.7 or ±2.5 or ±3.3 or ±5.5 KHz, depending on the channel spacing).
- De-emphasis : 75 µs or 750 µs or none (to be compatible with units of other brands).
- Sensitivity : < 0.25 µV, for 20 dB SND/N (CCITT measured).
- Audio output line : transformer balanced, floating.
- Output line level : +4 dBu (1230 mVrms) nominal (others on request).
- Output line impedance : < 100 ohm.
- NR-system : compander circuit, pre-set in NR (Wisycom Standard-NR) mode or excludable.
- AF bandwidth : ⇒ 300 Hz ÷ 2.5 KHz (-3 dB), for 12.5 kHz channel spacing;  
⇒ 300 Hz ÷ 3.3 KHz (-3 dB), for 20 kHz channel spacing;  
⇒ 300 Hz ÷ 4.5 KHz (-3 dB), for 25 kHz channel spacing;  
⇒ 300 Hz ÷ 8 KHz (-3 dB), for 50 kHz channel spacing.
- Distortion : < 3 % (CCITT measured).
- SND/D ratio : > 80 dB (CCITT measured).
- Receiving decoder : CTCSS type (sub-audio tone squelch).
- Led indications : ⇒ Receiver On (red Led)  
⇒ Squelch open (green Led)  
⇒ CTCSS decoder open (yellow Led).
- Powering : 10.5 ÷ 16 Vdc, 140 mA max. (negative ground).
- Dimensions : 120 x 43 x 160 mm (n. 1 module).
- Weight : approx. 600 g.

**NOTE [1]:** according to local regulations

The standard version of CSR 50-D complies with the following ETSI specifications:

- ⇒ ETS 300 086: versions with 12.5 or 20 or 25 KHz channel spacing;
- ⇒ ETS 300 422: version with 50 KHz channel spacing (usable on frequencies > 470 MHz).

**OPTIONAL ACCESSORIES:**

- AGN10 - UHF groundplane antenna (RG213 cable = 10m).
- AVN10 - UHF vertical-dipole antenna (RG213 cable = 10m).
- AWN35 - UHF whip antenna, to be mounted directly on the unit.
- CDC150 - Power cable for 12 Vdc external feeding (150 cm).
- CST50-D - UHF wireless-communication transmitter (400 ÷ 550 MHz), with compander circuit. (300 mW, 16 switchable frequencies in a 7 MHz switching-window).
- PSP910 - Mains power supply (100 ÷ 240 Vac), for use as “stand-alone” of one “desktop” unit..
- RST 503 - 19”/1U rack-frame, with built-in mains power supply (max. 3 x units CST50-D or CSR50-D).
- UPK100 - Working frequencies user programming kit (interface + software).