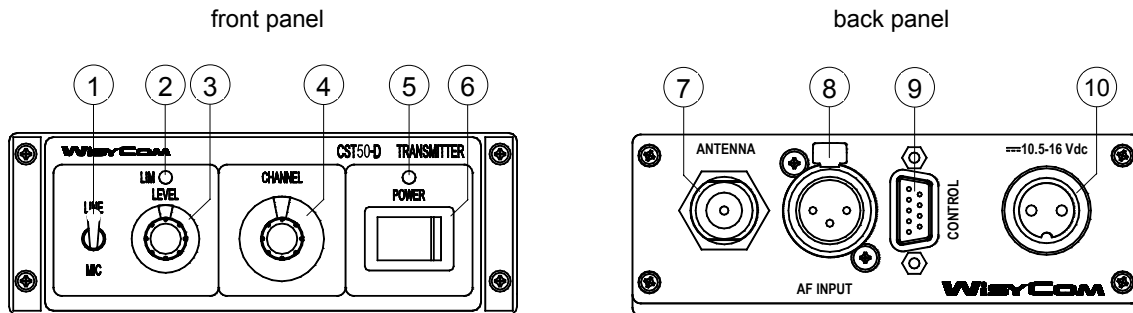


WIRELESS-COMMUNICATION SYSTEMS
CST 50 - UHF TRANSMITTER MODULE
for “desktop” & “in 19”/1U rack” use



- 1) SELECTOR: modulation audio input level range (**Micro / Line**).
- 2) LED INDICATION: peak-meter / limiter-on status (yellow Led).
- 3) ADJUSTMENT: audio input level.
With the optimum level adjustment, the yellow Led [2] must flash under modulation peaks.
- 4) SELECTOR: transmitting channel (**0 ÷ F**).
- 5) LED INDICATION: apparatus is on (red Led).
- 6) SWITCH: on / off (**Power**).
- 7) CONNECTOR: antenna (N-F type conn.).
- 8) CONNECTOR: modulation audio input (XLR3-F type connector).
The audio input line is transformer balanced and floating.
• pin 1 = ground; • pin 2 = AF-a input; • pin 3 = AF-b input.
- 9) CONNECTOR: input/output control signals (D15-F type connector - optional).
• pin 3 = PTT - this pin allows to operate the transmitter by a remote contact. To activate the carrier, this pin has to be grounded (or isolated from ground, depending on the internal pre-setting).
• pin 4 = ground
• pin 5 = AF-b output (see Note)
• pin 9 = AF-a output (see Note)
Note: when the CST50 transmitter module is furnished with the MTB50 “master” board (so becoming a CST50-MT “master” transmitter), from the pins 5 & 9 is carried out the composite signal (modulation & frequency-reference) suitable for control and modulation of all associated “slave” transmitters (the CST50-SL, with built-in SLB50 “slave” board).
- 10) CONNECTOR: dc power input (10.5 ÷ 16 Vdc)

**CST 50-D - UHF TRANSMITTER 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-window : 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 “UPK32 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 output power : 300 mW ÷ 10 mW (± 1 dB) [1].
- RF output 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).
- Audio input : transformer balanced, floating.
- Audio input level : **Micro / Line** switchable, and externally adjustable between:
 - ⇒ **Micro** -54 ÷ -23 dBu (1.5 ÷ 55 mVrms)
 - ⇒ **Line** -23 ÷ +8 dBu (55 ÷ 1950 mVrms).
- Audio input impedance : ⇒ **Micro** > 2 kohm
⇒ **Line** > 10 kohm.
- Peak-limiter : automatic, with dynamic-range > 20 dB over the level set for the nominal modulation.
- NR-system : compander circuit, pre-set in NR (Wisycos Standard-NR) mode or excludable.
- Pre-emphasis : 75 µS or 750 µS or off (to be compatible with units of other brands).
- 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 : < 0.5 % (0.25% typ.).
- SND/D ratio : > 80 dB (83 dB typ.), CCITT measured.
- LED indications : ⇒ Transmitter On (red LED)
⇒ Limiter On (yellow LED).
- Powering : 10.5 ÷ 16 Vdc, 300 mA max. (negative ground).
- Dimensions : 120 x 43 x 160 mm.
- Weight : 650 g approx.

NOTE [1]: according to local regulations

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

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

