



Commercial Satellite Receiver

CESR Series

Headend



○ Features & Benefits

- C and Ku Band Compatible - 950 to 1750 MHz
- Push Button Tuning of Transponder Frequency
- External 70 MHz IF loop for Easy TI Management

○ Specifications

The CESR-c is a professional quality, high performance, commercial satellite receiver. This unit is ideal for applications requiring a low cost, commercial grade satellite receiver. The CESR-c is C and Ku band compatible, accepting signals in the 950 to 1750 MHz frequency range. Frequency selection is accomplished via front panel push button switches, supporting both C band transponder and direct C and Ku band frequency settings. The receiver offers two modes of synthesized frequency control. A high-stability quartz crystal reference mode, with a 1 MHz tuning increment, allows for optimizing the receiver's terrestrial interference immunity. An AFC mode is also included, which provides tracking of the LNB frequency drift of the input signal. The ultra-stable phase locked loop demodulator features superior C/N threshold extension. This design delivers excellent picture quality, even under weak signal conditions. The unit can be set to one of two aural subcarrier modes, including fixed (6.8 MHz) and variable (5.4 to 8.2 MHz). An external 70 MHz IF loop is provided, which allows TI filters to be inserted as needed. This receiver comes standard with a 32 MHz IF bandwidth filter installed.

RF

Frequency Range: 950 to 1750 MHz
 Tuning Increment: 1 MHz
 Input Level: -60 to -25 dBm
 Image Rejection: 45 dB
 Impedance: 75 Ohm

IF

Frequency: 70 MHz
 Bandwidth: 32 (18, 20, and 25 optional) MHz
 Level: -10 dBm
 Static Threshold C/N: <8.0 dB
 Impedance: 75 Ohm

Video

Standard Video Frequency Range:
 25 Hz to 4.2 MHz
 Flat Video Frequency Range:
 25 Hz to >8.0 MHz
 Composite Video Frequency Range:
 25 Hz to >8.0 MHz
 Output Level: 1.0, ±3 dB adj. (V p-p)
 Format: NTSC, negative sync
 De-Emphasis: CCIR 405-1, 525 lines
 Polarity: standard or inverted
 Differential Gain: <5 %
 Differential Phase: <5 °
 Chrominance/Luminance Intermod Distortion:
 3 %
 Gain Inequality: ±5, max IRE
 Delay Inequality: ±26 ns
 Distortion
 Short Time: <3 %
 Line Time: <2 %
 Field Time: <3 %
 Dispersion Removal: >40 dB

Audio

Frequency Range: 20 Hz to 15 kHz
 Frequency Response: ±1.0 dB
 Output Level: 0 dBm
 Output Level Range: 0 to 12, minimum dB
 De-Emphasis: 50, 75, J17 µs
 Signal-to-Noise Ratio: 60 dB
 Harmonic Distortion: <1.0 %
 Impedance: 600, unbalanced Ohm

General

Power Requirements
 Voltage: 117, ±10% VAC
 Frequency: 60 Hz
 Power: 15 W
 LNB Supply
 Voltage: 17, min VDC
 Current: 250, max mA
 Fuse: 1/4
 Temperature Range: 0 to +50 °C

Mechanical

Dimensions (WxHxD):
 19.0 x 1.75 x 12.0 in.
 483 x 44 x 305 mm
 Weight: 7.50 lbs. (3.41 kg)

Controls (Front Panel)

Frequency Selection: Push Button Switches
 Video Polarity (NORM/INV): Slide Switch
 Tuner Reference (XTAL/AFC): Slide Switch
 AFC Fine Tuning: Control
 Audio Subcarrier Select (6.8/VAR): Slide Switch
 Audio Subcarrier Tuning: Control
 Video Level: Control
 Audio Level: Control

Controls (Rear Panel)

LNB Power (ON/OFF): Slide Switch
 Aural Bandwidth (Narrow/Wide): Slide Switch

Indicators (Front Panel)

Power ON: LED, green
 Signal Strength OK: LED, green

Connectors (Rear Panel)

RF Input/LNB Power: "F" type, female
 70 MHz IF Output: "F" type, female
 70 MHz IF Input: "F" type, female
 Video Output, Standard: "F" type, female
 Video Output, Flat: "F" type, female
 Video Output, Composite: "F" type, female
 Audio Output: RCA Phono, female

Refer to product instruction manual for additional specification measurements and notes.

○ Ordering Information

Model	Stock No.	Description
CESR-C ✱	6166	Commercial Satellite Receiver 950-1750 C & Ku Band Capable
CESR Options		
CESR-OPT 02	6470	CESR-c Option: Stereo Audio
CESR-OPT 03	6480	CESR-c Option: Second Audio Subcarrier