

CTR-70

ALL-IN-ONE TRUE MONOPULSE TRACKING RECEIVERS FOR
ANTENNA AUTOTRACK SYSTEMS

- Key equipment of the tracking chain
- High accuracy tracking with exail standard downconverter (model TDC)
- Autocalibration and autophasing functions included
- Monopulse and monoscan applications



ISO9001/EN9100/AS9100/JISQ9100

EUROPEAN CONFORMITY

EN 301489-1

EN 60950-1

MIL-STD-810G (table 5146C-II cat 4 + shock 30G11ms)

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CHARACTERISTICS

- Input frequency 70 MHz \pm 1,5 MHz
- Noise figure < 13 dB max
- Interchannel isolation > 60 dB
- IF rejection > 50 dB
- Image rejection > 50 dB
- Dynamic range > 80 dB
- Input level
 - Sum: -100 dBm/ -10 dBm Δ : -120 dBm / -30 dBm
 - Co-polar: -120 dBm / -40 dBm
- Input VSWR
 - 1.5: 1 / 50 Ω
 - Connector type SMA
- Search range (in kHz) \pm 1 to \pm 1500 step 1 kHz
- Phase adjustment 0 up to 359°
- Error signal
 - Level up to \pm 10 Volts
 - Impedance 1 k Ω
 - Bandwidth 1, 10, 100, 1000 ms (integration time)
 - Drift \pm 5° / \pm 1 dB
- Auxiliary outputs
 - AGC, IF (Σ , Δ)
 - APA + Lock status
- Autocalibration (with exail TDC) and autophasing functions

MONITORING & CONTROL

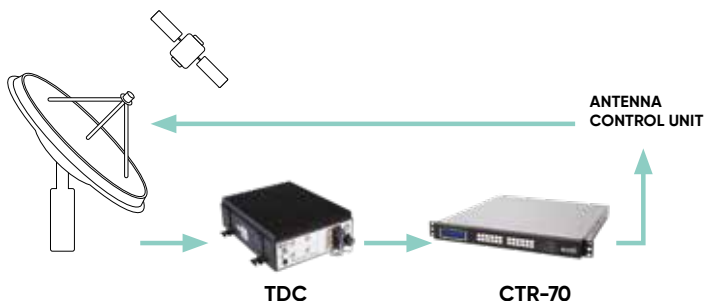
- Interface Ethernet, RS232

POWER SUPPLY

- Voltage 100 V / 240 V \pm 10%
- Frequency 47 to 63 Hz
- Consumption <60 VA

SYSTEM OVERVIEW

Antenna Tracking system for optimum RF signal strength from a moving satellite



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COHERENT MODE

- Loop bandwidth (2 BL in Hz) 10,30,100,300,1000,3000
 - Acquisition threshold: 10 dB in 2 BL
 - Anti-side band system: Yes
- Frequency stability: \pm 5. 10⁻⁸/day or external reference

NO-COHERENT MODE

- IF bandwidth (KHZ) 10,50, 150, 500, 1500, 5000
- Acquisition threshold S/N in IF \geq 3 dB

MONOSCAN

- Dynamic Range -80 to -20 dBm
- Coherent:
 - Loop bandwidth 1000 Hz
 - Acquisition threshold 10dB in 2BL
- No-Coherent:
 - IF bandwidth 5000 KHz
 - Acquisition threshold S/N in IF \geq 3 dB

ENVIRONMENTAL CONDITIONS

- Temperature
 - Operating: +10 °C to +45 °C
 - Non-operating: -30 °C to +70 °C
- Humidity
 - Operating: 90% without condensing
 - Non-operating: up to 95% at 30 °C

RELIABILITY

- MTBF 40 000 hours

DIMENSIONS

- Drawer 19" x 1 U x 460 mm (depth)

MODELS

- CTR-70 Msc - 1 ch in Monoscan
- CTR-70 B - 2 ch (Sum, Err. X/Y=90°)
- CTR-70 E - 3 channels (2 Sum, 1 Err)
- CTR-70 F - 3 channels (Sum, X, Y)



REMOTE GUI