



# **TDC**

TRACKING DOWN-CONVERTER FOR TELEMETRY, TRACKING AND COMMAND (TT&C) AND EARTH OBSERVATION

- → AUTO-CALIBRATION
- → INTERNAL SYNTHESIZER
- → LOW GAIN / PHASE SHIFT
- → STATUS MONITORS & SUMMARY ALARM
- → RS-422 OR ETHERNET M & C



## **TDC**

TRACKING DOWN-CONVERTER FOR TELEMETRY, TRACKING & COMMAND (TT&C) AND EARTH **OBSERVATION** 

#### **INPUT**

- Freq. band- See ordering information scheme
- Level from -100dBm to -30dBm
- Noise figure ≤12dB
- Connector SMA female, 2.9mm(K) in the Ka Band2 version

#### **OUTPUT**

- Freg (Fo) 70 Mhz
- Pout @ 1dB compression ≥5dBm
- Connector SMA female, N in outdoor version

#### **TRANSFER**

- Conversion gain 25dB ±5dB
- Image rejection >60dB
- Isolation between channels >60dB

#### **FREQUENCY REFERENCE**

- Frequency 5 and 10 Mhz
- Connector BNC female, SMA in outdoor version

#### **LOCAL OSCILLATOR**

- Step size 1Khz
- Phase Noise

@100Hz: -68dBc/Hz @ 1KHz: -80dBc/Hz @ 10KHz: -88dBc/Hz

### **POWER SUPPLY**

- Voltage  $115 / 240 \, \text{Vac} \pm 10 \, \%$
- Frequency 47 to 63 Hz
- Consumption 50VA typ

#### **AUTO CALIBRATION**

The Auto-calibration process is periodically performed for compensation of the gain and the phase offset between channels

#### **MONITORING & CONTROL**

- Interfaces RS422
- Ethernet via the CTR-70



Outdoor package

#### RELIABILITY

- MTBF 50 000 hours
- MTTR 1h with an equipment spare

#### **MECHANICAL CHARACTERISTICS INDOOR**

- Drawer19" x 2 U x 460 mm
- Weight 12 kg

#### **OUTDOOR**

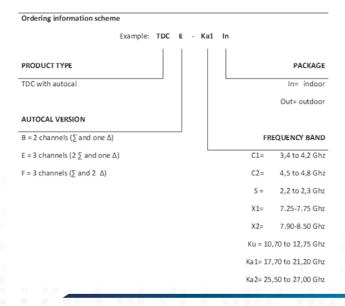
- Drawer 400 x 400 x 150 mm
- Weight 15 kg

#### **ENVIRONMENTAL CONDITIONS INDOOR**

- Operating 10°C to 40°C
- Storage -30°C to +70°C
- Humidity 95% @ 35°C

#### **OUTDOOR**

- Operating -20°C to 50°C
- Storage -30°C to +70°C
- Humidity 100% in operating
- Waterproofness IP65





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