



COMPACT IFM RECEIVER

GENERAL DESCRIPTION

Compact IFM Receiver receives radar signals across 2 GHz to 18 GHz spectrum and instantly generates Pulse Description Words including Frequency, Amplitude, Pulse Width, Time of Arrival, PRI etc. data to be transmitted over Gigabit Ethernet Interface. There is also LVDS interface for critical settings and telemetry data.

Ultra compact designs incorporate DFD and SDLVA blocks as well as signal processor board which generates PDWs in nano seconds. Signal processor is capable of generating more than 2 million PDWs per second. User may define digital filters to get rid of undesired ones.

Systems can be enhanced with switch multiplexer filters for eliminating undesired signals. These systems can also be stacked to be used in multi channel applications for DF capability.

TUALCOM has ongoing projects utilizing superheterodyne receivers for a broader frequency range and DRFM based solutions for various applications such as radar simulators, ECM, COMINT systems etc.

KEY SPECIFICATIONS

- Ultra Compact
- High Precision & High Resolution
- PDW Generation
- MIL-STD-810G / 461F Compatible
- User Friendly Interface
- Digital Filtering
- Excellent SwaP (Size/Weight/Power)
- Ultra Fast Response

BENEFITS

- Low SwaP
- Ideal for miniature electronic support applications
- Suitable for deployment in small unmanned platforms

COMPACT IFM RECEIVER



Dimensions (cm)

15.2 x 14.7 x 3.0



Weight (g)

1060



Frequency Band

2 - 18 GHz



Instantaneous Bandwidth

16 GHz



Frequency Sensitivity

1 MHz



Frequency Precision

≤ 3 MHz RMS



Dynamic Range

65 dB (-55, +10 dB)



Min. Pulse Width

100 ns



Max. Pulse Width

CW



PW Precision

10 ns



Amplitude Precision

3 dB RMS



Operating Power

400 mA @ 28 V DC



Operating Temperature

-40 °C To +80 °C



RF Connector

SMA Female



Data Connector


Micro-D 15 Pin Female
Micro-D 51 Pin Female

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 TUALCOM

 www.tualcom.com

 sales@tualcom.com

 +90 (312) 485 22 85



130032601