

# DIGITAL 1000 Wideband 500MHz IDU

## RF over IP/Digital IF

Model DI-EDM-S2-1702 is a wideband DIGITAL 1000 Series unit operating with 500MHz of Instantaneous Bandwidth on each of 2 fully independent, full duplex RF channels. Housed in an indoor unit.

Dual channel  
Full duplex



500MHz Instantaneous  
Bandwidth

DIFI Standard Compliant  
Information Class 0x0000,  
0x0002, 0x0003, 0x0004

RF Parameters	
Capacity	Two channels, full duplex
Instantaneous Bandwidth	500 MHz
Sample Rate	750 MSPS
ADC Sample Depth	8 bits per I or Q sample (Upgradeable to 12 bits)
DAC Sample Depth	16 bits per I or Q sample
Digital Data Transport	SFP+
Data Protocol	IEEE-ISTO Std 4900-2021 (DIFI) Information Class 0x0000, 0x0002, 0x0003, 0x0004
DIFI Sample Depth	8-16 bits per I or Q Sample
Output Bandwidth	10 - 500MHz
Input & Output Ports	RF: 50Ω SMA 1PPS: 50Ω SMA 10MHz: 50Ω SMA Sample Data: SFP+ Control: RJ45
Frequency	850 - 2450MHz
Flatness	±0.5 dB
Input Gain Control	15 dB (Manual in 0.25dB steps)
Output Gain Control	10 dB (Manual in 0.25dB steps)
Input Slope Control	10 dB
Output Slope Control	10 dB
Input Return Loss	17 dB typ.
Output Return Loss	17 dB typ.
SFDR	60 dBc
Out of Band Rejection	50 dB
Noise Figure	24 dB
1dB GCP	-5 dBm
OIP3	5 dBm



Power	
RF Power Detect	Range -50 dBm to -0 dBm (Total power across RF band) Accuracy +/- 2 dB
Input RF Power	0dBm (Absolute total maximum)
Module DC Power	12 - 24VDC
DC Consumption	50W (Full load, max. consumption at steady rate)
System Control	
User Alarms	Via Ethernet
Monitoring	LEDs
Remote Control & Monitoring	REST API SNMP V3, V2C ETL Protocol
Physical & Environmental	
Operating Temperature	0°C to 40°C
Storage Temperature	-20°C to +60°C
Storage Humidity	20 to 90% non-condensing
Operating Altitude	10,000 feet AMSL
Storage Altitude	30,000 feet AMSL
IP Rating	IP21
Weight	0.49kg
Dimensions	215mm x 85mm x 40mm (excluding cooling fans)
Module Finish	RAL9003 - white
Spec. Version	0.3

**Note 1:** Typical parameters are guide figures and measured data may deviate from the quoted figures. ETL endeavours to exceed the quoted typical parameters where practically possible.

**Note 2:** Operation beyond the quoted limits stated above may cause instantaneous and permanent damage. For reliable long term operation do not exceed the parameters given in above.

**Note 3:** The spec table is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.

**Note 4:** This product is classified as Dual Use and is subject to United Kingdom export control regulations.