CDD-880 Multi-Receiver Router

Advanced VSAT Solutions



Overview

Comtech EF Data's Advanced VSAT Solutions portfolio provides high-performance satellite-based communication solutions for a diverse range of applications, including maritime and offshore communications, mobile backhaul with RAN optimization, IP trunking and backhaul, corporate and enterprise networks, emergency and disaster recovery. Incorporating advanced technologies developed by Comtech EF Data, AHA Products Group, Memotec and Stampede, the solutions provide unmatched performance, industry-leading bandwidth efficiencies and network optimization – while minimizing Total Cost of Ownership.

Designed for use at the hub site, the CDD-880 can receive transmissions from up to 12 CDM-840 Remote Routers. It combines a number of advanced technologies in a 1RU platform enabling the most efficient return channel for hub-spoke networks:

- · High-performance packet processing
- Lossless Payload decompression
- Header decompression
- Dynamic SCPC with VMS
- VersaFEC[®] low-latency LDPC
- Ultra low overhead Streamline Encapsulation (SLE)

Features

- Up to 12 Demodulators in 1RU chassis
 - Data rate: 16 kbps to 15.35 Mbps
 - Symbol rate: 16 ksps to 4.5 Msps
 - VersaFEC low-latency LDPC Forward Error Correction Adaptive Coding and Modulation (ACM) capable
 - Modulation: BPSK, QPSK, 8-QAM, 16-QAM
 - Rolloff: 20%, 25%, 35%
- High-Performance Integrated Packet Processing
 - Layer 2 (Bridged Point to Multipoint BPM) or Layer 3 (Routed) operation
 - Jumbo frame support
 - VLAN support in BPM mode
 - Header decompression, including Layer 2 headers in BPM mode
 - Lossless payload decompression
 - Ultra low overhead Streamline Encapsulation
- Integrated with NetVue Integrated Management System and Vipersat Management System
- Operating Frequency: 950 to 2150 MHz
- Traffic Interface: 10/100/1000Base-T Ethernet
- Management Interface:10/100/1000Base-T Ethernet for web and SNMP
- Redundancy options
- LNB support

- **Typical Users**
- Offshore & Maritime
- Mobile Operators
- Telecom Operators
- Enterprise
- Internet Service Providers (ISPs)

Common Applications

- Maritime & Offshore Communications
- Mobile Backhaul with RAN
 Optimization
- IP Trunking & Internet Access (ISP)

Specifications

ReceiverSide Demodulators 2, 4, 6, 8, 10 012 Per 1RU Chassis 16 kbps to 15.35 Mbps, in 1 bps step (CCM mode) (Modulation and FEC dependent) Maximum Aggregate Receive Data Rate 50 Mbps Symbol Rate (Each Demodulator) 16 ksps to 4.5 Msps (CCM mode) FEC VersaFEC Decoder (ACM and CCM modes) Modulation & Code Rate Data Rate Range BPSK 0.488 16 kbps - 2.19 Mbps OPSK 0.531 21 kbps - 5.67 Mbps QPSK 0.631 21 kbps - 5.67 Mbps QPSK 0.803 26 kbps - 7.22 Mbps 8-QAM 0.780 38 kbps - 9.6 Mbps 8-QAM 0.780 38 kbps - 10.53 Mbps 16-QAM 0.780 50 kbps - 14.91 Mbps 16-QAM 0.829 54 kbps - 13.36 Mbps 16-QAM 0.823 55 kbps - 15.35 Mbps Operating Frequency 950 to 2150 MHz L-Band, 100 Hz Torquency resolution 70 Hz Connector Type N (female) Input Power Range, -130 + 10 log(symbol rate) to -80 + 10 Desired Carrier 50 Ω <	Specifications	
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QPSK 0.80326 kbps - 7.22 Mbps8-QAM 0.64231 kbps - 8.67 Mbps8-QAM 0.71135 kbps - 9.6 Mbps8-QAM 0.78038 kbps - 10.53 Mbps16-QAM 0.73147 kbps - 13.16 Mbps16-QAM 0.78050 kbps - 14.91 Mbps16-QAM 0.82954 kbps - 14.91 Mbps16-QAM 0.85355 kbps - 15.35 MbpsOperating Frequency950 to 2150 MHz L-Band, 100 Hz frequency resolutionOperating BandwidthAll carriers must be within 70 MHzConnectorType N (female)Impedance50 Ω Return Loss18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmOperating Level-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmAbsolute Maximum, No Damage+20 dBmAbsolute Maximum, No Damage+20 dBmAcquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec ± Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) > = 64 ksymbols/sec ± Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) > = 64 ksymbols/sec ± Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) > = 64 ksymbols/sec ± 20 km 2 - 30 dBm ± 3 dBLNB Voltage (Older units require HW ECO)Via center conductor of RX input, selectable on/off, 13 VDC, 18 VDC, 24 VDCLNB Current AlarmProgrammable MIN and MAX current alarmsMonitor FunctionsEs/No estimate, Receive Signal Strength	QPSK 0.706	23 kbps – 6.34 Mbps
8-QAM 0.64231 kbps - 8.67 Mbps8-QAM 0.71135 kbps - 9.6 Mbps8-QAM 0.78038 kbps - 10.53 Mbps16-QAM 0.78050 kbps - 14.04 Mbps16-QAM 0.82954 kbps - 13.16 Mbps16-QAM 0.82954 kbps - 14.91 Mbps16-QAM 0.85355 kbps - 15.35 MbpsOperating Frequency950 to 2150 MHz L-Band, 100 Hz frequency resolutionOperating BandwidthAll carriers must be within 70 MHzConnectorType N (female)Impedance50 Ω Return Loss18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmMaximum Composite Operating LevelLesser of +10 dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz less desired carrier occupied bandwidth. This spec allows the entire 950-2150 MHz less desired carrier occupied bandwidth. This spec allows the entire 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral densityAbsolute Maximum, No Damage20%, 25%, 35%Acquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec t Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) >= 64 ksymbols/sec ± 32 kHz (fixed)De-scramblingCorntech, disabledSpectral InversionNormal or invertedLNB Voltage (Older units require HW ECO)Via center conductor of RX input, selectable on/off, 13 VDC, 18 VDC, 24 VDCLNB Current500 mA, maximumLNB Current AlarmProgrammable MIN and MAX	QPSK 0.803	
8-QAM 0.71135 kbps - 9.6 Mbps8-QAM 0.78038 kbps - 10.53 Mbps16-QAM 0.73147 kbps - 13.16 Mbps16-QAM 0.78050 kbps - 14.04 Mbps16-QAM 0.82954 kbps - 14.91 Mbps16-QAM 0.85355 kbps - 15.35 MbpsOperating Frequency950 to 2150 MHz L-Band, 100 Hz frequency resolutionOperating BandwidthAll carriers must be within 70 MHzConnectorType N (female)Imput Power Range, Desired Carrier18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmMaximum Composite Operating LevelLesser of +10 dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz less desired carrier occupied bandwidth. This spec allows the entire 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral densityAbsolute Maximum, No Damage+20 dBmRolloff20%, 25%, 35%Acquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec ± Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) >= 64 ksymbols/sec ± 32 kHz (fixed)De-scramblingComtech, disabledSpectral InversionNormal or invertedLNB Reference (Older units require HW ECO)Via center conductor of RX input, 10.0 MHz ± 0.06 ppm Selectable on/off, 13 VDC, 18 VDC, 24 VDCLNB Current500 mA, maximumLNB Current Alarm alarmsProgrammable MIN and MAX current alarms		
8-QAM 0.78038 kbps - 10.53 Mbps16-QAM 0.73147 kbps - 13.16 Mbps16-QAM 0.78050 kbps - 14.04 Mbps16-QAM 0.82954 kbps - 15.35 MbpsOperating Frequency950 to 2150 MHz L-Band, 100 Hz frequency resolutionOperating BandwidthAll carriers must be within 70 MHzConnectorType N (female)Impedance50 ΩReturn Loss18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmMaximum Composite Operating Level-130 + 10 dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral densityAbsolute Maximum, No Darmage+20 dBmRolloff20%, 25%, 35%Acquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec t ± Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) >= 64 ksymbols/sec t 3 2 kHz (fixed)De-scrambling Comtech, disabledVia center conductor of RX input, 10.0 MHz ± 0.06 ppm Selectable on/off, -3.0 dBm ± 3 dBLNB Voltage (Older units require HW ECO)Via center conductor of RX input, selectable on/off, -3.0 dBm ± 3 dBLNB Current LNB Current Alarm500 mA, maximumLNB Current AlarmProgrammable MIN and MAX current alarms		35 kbps – 9.6 Mbps
16-QAM0.73147 kbps13.16 Mbps16-QAM0.78050 kbps-14.04 Mbps16-QAM0.82954 kbps-14.91 Mbps16-QAM0.85355 kbps-15.35 MbpsOperating Frequency950 to 2150 MHz L-Band, 100 Hz frequency resolutionOperating BandwidthAll carriers must be within 70 MHzConnectorType N (female)Impedance50 Ω Return Loss18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmMaximum Composite Operating Level-130 + 10 dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz less desired carrier occupied bandwidth. This spec allows the entire 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral densityAbsolute Maximum, No Damage20%, 25%, 35%Acquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec ± Rs/2 kHz (fixed), Rs in ksymbols/sec t Rs/2 kHz (fixed)De-scrambling Spectral InversionNormal or invertedLNB Reference (Older units require HW ECO)Via center conductor of RX input, selectable on/off, -3.0 dBm ± 3 dBLNB Voltage (Older units require HW ECO)Via center conductor of RX input, selectable on/off, 13 VDC, 18 VDC, 24 VDCLNB Current LNB Current AlarmForgammable MIN and MAX current alarmsMonitor FunctionsEs/No estimate, Receive Signal Strength		
16-QAM 0.78050 kbps - 14.04 Mbps16-QAM 0.82954 kbps - 15.35 MbpsOperating Frequency950 to 2150 MHz L-Band, 100 Hz frequency resolutionOperating BandwidthAll carriers must be within 70 MHzConnectorType N (female)Impedance50 Ω Return Loss18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmMaximum Composite Operating LevelLesser of +10 dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral densityAbsolute Maximum, No Damage+20 dBmRolloff20%, 25%, 35%Acquisition RangeComtech, disabled Via center conductor of RX input, 10.0 MHzDe-scramblingComtech, disabled Via center conductor of RX input, 10.0 MHz ± 0.06 ppm Selectable on/off, -3.0 dBm ± 3 dBLNB Voltage (Older units require HW ECO)Via center conductor of RX input, selectable on/off, 13 VDC, 18 VDC, 24 VDCLNB Current500 mA, maximumLNB Current AlarmProgrammable MIN and MAX current alarmsMonitor FunctionsEs/No estimate, Receive Signal Strength		17 kbps = 12.16 Mbps
16-QAM 0.82954 kbps - 14.91 Mbps16-QAM 0.85355 kbps - 15.35 MbpsOperating Frequency950 to 2150 MHz L-Band, 100 Hz frequency resolutionOperating BandwidthAll carriers must be within 70 MHzConnectorType N (female)Impedance50 Ω Return Loss18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmDesired Carrierlog(symbol rate) dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral densityAbsolute Maximum, No Damage+20 dBmRolloff20%, 25%, 35%Acquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec $\pm Rs/2$ kHz (fixed), Rs in ksymbols/sec $\pm Rs/2$ kHz (fixed), Rs in ksymbols/sec $\frac{\pm Rs/2$ kHz (fixed)De-scramblingComtech, disabledSpectral InversionNormal or invertedLNB Reference (Older units require HW ECO)Via center conductor of RX input, selectable on/off, -3.0 dBm ± 3 dBLNB Current LNB Current AlarmYoe cestimate, Receive Signal Strength		47 Kups = 13.10 Wups
16-QAM 0.85355 kbps – 15.35 MbpsOperating Frequency950 to 2150 MHz L-Band, 100 Hz frequency resolutionOperating BandwidthAll carriers must be within 70 MHzConnectorType N (female)Impedance50 ΩReturn Loss18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmMaximum Composite-430 + 10 log(symbol rate) dBmOperating LevelLesser of +10 dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral densityAbsolute Maximum, No Damage+20 dBmRolloff20%, 25%, 35%Acquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec ± Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) >= 64 ksymbols/sec ± 32 kHz (fixed)De-scramblingCorntech, disabledSpectral InversionNormal or invertedLNB Reference (10 MHz)Via center conductor of RX input, 10.0 MHz ± 0.06 ppm Selectable on/off, -3.0 dBm ± 3 dBLNB Current ECO)500 mA, maximumLNB Current AlarmProgrammable MIN and MAX current alarmsMonitor FunctionsEs/No estimate, Receive Signal Strength		50 KDps - 14.04 Mibps
Operating Frequency950 to 2150 MHz L-Band, 100 Hz frequency resolutionOperating BandwidthAll carriers must be within 70 MHzConnectorType N (female)Impedance50 Ω Return Loss18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmMaximum Composite Operating LevelLesser of +10 dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz less desired carrier occupied bandwidth. This spec allows the entire 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral density +20 dBmAbsolute Maximum, No Damage Rolloff20%, 25%, 35%Acquisition Range Spectral InversionReceive Symbol Rate (Rs) < 64 ksymbols/sec ± Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) >= 64 ksymbols/sec t 32 kHz (fixed)De-scrambling (10 MHz)Comtech, disabledSpectral InversionNormal or invertedLNB Reference (Older units require HW ECO)Via center conductor of RX input, selectable on/off, -3.0 dBm ± 3 dBLNB Current LNB Current Alarm500 mA, maximumMonitor FunctionsFrequence Forgammable MIN and MAX current alarms		54 kbps – 14.91 Mbps
Image: Constant of the second state in the second		
Operating BandwidthAll carriers must be within 70 MHzConnectorType N (female)Impedance 50Ω Return Loss18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier $-130 + 10 \log(symbol rate) to -80 + 10$ $\log(symbol rate) dBmMaximum CompositeOperating LevelLesser of +10 dBm or 105 - 10 log (symbolrate, desired carrier) dBc, uniformly spreadacross 950-2150 MHz less desired carrieroccupied bandwidth. This spec allows theentire 950-2150 MHz.L-Band to be filled with an average uniformspectral density that is 14 dB greater thanthe desired carrier spectral densityAbsolute Maximum, NoDamage+20 dBmRolloff20%, 25%, 35%Acquisition RangeReceive Symbol Rate (Rs) < 64ksymbols/sec± Rs/2 kHz (fixed), Rs in ksymbols/sect Rs/2 kHz (fixed)De-scramblingCornetch, disabledSpectral InversionNormal or invertedLNB Reference(10 MHz)Via center conductor of RX input,selectable on/off, -3.0 dBm ± 3 dBLNB Voltage(Older units require HWECO)Via center conductor of RX input,selectable on/off, 13 VDC, 18 VDC, 24VDCLNB CurrentLNB Current AlarmProgrammable MIN and MAX currentalarmsMonitor FunctionsEs/No estimate, Receive Signal Strength$	Operating Frequency	
ConnectorType N (female)Impedance50 ΩReturn Loss18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmMaximum Composite Operating Level-130 + 10 dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral densityAbsolute Maximum, No Damage+20 dBmRolloff20%, 25%, 35%Acquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec ± Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) >= 64 ksymbols/sec ± Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) >= 64 ksymbols/sec ± Rs/2 kHz (fixed), Contech, disabledDe-scramblingComtech, disabledSpectral InversionNormal or invertedLNB Voltage (Older units require HW ECO)Via center conductor of RX input, selectable on/off, 13 VDC, 18 VDC, 24 VDCLNB Current500 mA, maximum Programmable MIN and MAX current alarmsMonitor FunctionsEs/No estimate, Receive Signal Strength		
Impedance50 ΩReturn Loss18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier-130 + 10 log(symbol rate) dBmMaximum Composite Operating Level-130 + 10 dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz less desired carrier occupied bandwidth. This spec allows the entire 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral densityAbsolute Maximum, No Damage20%, 25%, 35%Acquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec ± Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) >= 64 ksymbols/sec ± 32 kHz (fixed)De-scrambling Spectral InversionComtech, disabledDe-scrambling (10 MHz)Via center conductor of RX input, 10.0 MHz ± 0.06 ppm Selectable on/off, -3.0 dBm ± 3 dBLNB Voltage (Older units require HW ECO)Via center conductor of RX input, solo mA, maximumLNB Current LNB Current AlarmProgrammable MIN and MAX current alarmsMonitor FunctionsEs/No estimate, Receive Signal Strength	Operating Bandwidth	All carriers must be within 70 MHz
Return Loss18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmMaximum Composite Operating LevelLesser of +10 dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz less desired carrier occupied bandwidth. This spec allows the entire 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral densityAbsolute Maximum, No Damage+20 dBmRolloff20%, 25%, 35%Acquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec $\pm Rs/2 kHz$ (fixed), Rs in ksymbols/sec $Receive Symbol Rate (Rs) >= 64$ ksymbols/sec to 23 kHz (fixed)De-scramblingComtech, disabledSpectral InversionNormal or invertedLNB Reference (Older units require HW ECO)Via center conductor of RX input, selectable on/off, -3.0 dBm \pm 3 dBLNB Current LNB Current Alarm500 mA, maximumMonitor FunctionsEs/No estimate, Receive Signal Strength	Connector	Type N (female)
Return Loss18 dB, minimum (typical 20 dB)Input Power Range, Desired Carrier-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmMaximum Composite Operating LevelLesser of +10 dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz less desired carrier occupied bandwidth. This spec allows the entire 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral densityAbsolute Maximum, No Damage+20 dBmRolloff20%, 25%, 35%Acquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec $\pm Rs/2 kHz$ (fixed), Rs in ksymbols/sec $Receive Symbol Rate (Rs) >= 64$ ksymbols/sec to 23 kHz (fixed)De-scramblingComtech, disabledSpectral InversionNormal or invertedLNB Reference (Older units require HW ECO)Via center conductor of RX input, selectable on/off, -3.0 dBm \pm 3 dBLNB Current LNB Current Alarm500 mA, maximumMonitor FunctionsEs/No estimate, Receive Signal Strength	Impedance	50 Ω
Input Power Range, Desired Carrier-130 + 10 log(symbol rate) to -80 + 10 log(symbol rate) dBmMaximum Composite Operating LevelLesser of +10 dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz less desired carrier occupied bandwidth. This spec allows the entire 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral densityAbsolute Maximum, No Damage+20 dBmRolloff20%, 25%, 35%Acquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec ± Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) >= 64 ksymbols/sec ± 32 kHz (fixed)De-scramblingComtech, disabledSpectral InversionNormal or invertedLNB Reference (0lder units require HW ECO)Via center conductor of RX input, selectable on/off, 13 VDC, 18 VDC, 24 VDCLNB Current500 mA, maximumLNB Current AlarmProgrammable MIN and MAX current alarmsMonitor FunctionsEs/No estimate, Receive Signal Strength	•	18 dB, minimum (typical 20 dB)
Desired Carrierlog(symbol rate) dBmMaximum Composite Operating LevelLesser of +10 dBm or 105 - 10 log (symbol rate, desired carrier) dBc, uniformly spread across 950-2150 MHz less desired carrier occupied bandwidth. This spec allows the entire 950-2150 MHz. L-Band to be filled with an average uniform spectral density that is 14 dB greater than the desired carrier spectral densityAbsolute Maximum, No Damage+20 dBmRolloff20%, 25%, 35%Acquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec ± Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) >= 64 ksymbols/sec ± 32 kHz (fixed)De-scramblingCorntech, disabledSpectral InversionNormal or invertedLNB Reference (10 MHz)Via center conductor of RX input, selectable on/off, -3.0 dBm ± 3 dBLNB Voltage (Older units require HW ECO)Via center conductor of RX input, selectable on/off, 13 VDC, 18 VDC, 24 VDCLNB Current LNB Current AlarmProgrammable MIN and MAX current alarmsMonitor FunctionsEs/No estimate, Receive Signal Strength		
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Acquisition RangeReceive Symbol Rate (Rs) < 64 ksymbols/sec ± Rs/2 kHz (fixed), Rs in ksymbols/sec Receive Symbol Rate (Rs) >= 64 ksymbols/sec ± 32 kHz (fixed)De-scramblingComtech, disabledSpectral InversionNormal or invertedLNB Reference (10 MHz)Via center conductor of RX input, 10.0 MHz ± 0.06 ppm Selectable on/off, -3.0 dBm ± 3 dBLNB Voltage (Older units require HW ECO)Via center conductor of RX input, selectable on/off, 13 VDC, 18 VDC, 24 VDCLNB Current LNB Current Alarm500 mA, maximumLNB Current AlarmProgrammable MIN and MAX current alarmsMonitor FunctionsEs/No estimate, Receive Signal Strength		000/ 050/ 050/
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Monitor Functions Es/No estimate, Receive Signal Strength		
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indicator (RSSI), frequency offset		
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Packet Processor

Supported Protocols			
RFC 768 – UDP	RFC 1812 – IPv4 Routers		
RFC 791 – IP	RFC 2045 – MIME		
RFC 792 – ICMP	RFC 2474 – Diffserv		
RFC 793 – TCP	RFC 2475 – Diffserv		
RFC 826 – ARP	RFC 2578 – SMI		
RFC 856 – Telnet	RFC 2597 – AF PHB		
RFC 862 – Ping	RFC 2598 – Expedite Forwarding		
RFC 894 – IP	RFC 2616 – HTTP		
RFC 959 – FTP	RFC 3412 – SNMP		
RFC 1112 – IP Multicast	RFC 3416 – SNMPv2		
RFC 1213 – SNMP MIB II	RFC 3418 – SNMP MIB		
Statistics	Detailed packet and throughput stats		

Connectors

L-Band Receive	1 x N-type (female)	
10/100/1000Base-T Ethernet interface (IEEE 802.3ab)	2 x RJ-45	
Console / Remote Control	9-pin D-sub (male)	

Available Options

Option	Туре
-48 VDC, Primary Power Supply	Hardware
Aggregate Receive Data Rate	FAST

Connectors

Dimensions (1RU) (height x width x depth)	1.75" x 19.0" x 17.7" (4.4 x 48 x 44.8 cm) approximate
Power Supply	100-240 VAC, 47 Hz-63 Hz IEC 320 input -48 VDC (HW option)
Operating Temperature	0 to 50°C
Storage temperature	–20 to 70°C
Humidity	95% maximum, non-condensing

Regulatory

CE Mark	EN 301 489-1 (ERM)
	EN55022 (Emissions)
	EN55024 (Immunity)
	EN 61000-3-2
	EN 61000-3-3
	EN60950 (Safety)
FCC	FCC Part 15, Subpart B



CDD-880 Back Panel

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