

TRANSMITTER

# **V-IPLink**

Multi-mode Video Content Transmission Platform



V-IPLink is the next-generation, ATSC 3.0-ready digital microwave system. This IP-centric solution is specifically designed to meet broadcasters' studio-to-transmitter requirements.

The 2RU chassis combines sleek design with the reliable performance of a modern broadcast microwave system.

The streamlined physical design features integrated TX/RX transceivers within a single enclosure, complemented by front-panel touchscreen display for monitoring critical performance metrics and alarms. This modular platform offers a highly adaptable and configurable solution, tailored to meet a wide range of customer requirements.

The system delivers enhanced RF gain performance through improvements in linearization and LDPC forward error correction (FEC) which reduces the incidence of packet loss over long or unreliable transmission paths.

V-IPLink offers increased data throughput by utilizing modulation architectures up to 1024QAM and XPIC (cross-polarization interference cancellation). XPIC is a spectrally-efficient technique that doubles data rates by simultaneously operating on both horizontal and vertical polarizations using the same channel frequency. XPIC is highly beneficial when only one channel frequency per path is available.

V-IPLink harness the power of ACM (Adaptive Coding Modulation), enabling dynamic adjustments to the modulaton scheme, optimizing the transmission system based on prevailing path conditions, and maximizing the transported bit rate.

V-IPLink is available in both protected (1+1, hot-standby) and non-protected duplex configurations and can be designed for simplex operation, including spatial diversity receive systems.



Automatic Modulation Down Shift Automatic Modulation Up Shift

The Constellation Order will be selected on MER analysis and the highest and lowest are user selectable.

#### **Key Features**

All-indoor, space-efficient 2RU x 19" (48cm) rack mount

Ultra-high linearity broadband RF power amplifiers

Exceptional system gain performance

High capacity ASI & Gigabit Ethernet IP data transport

Automatic transmitter power control

Adaptive code modulation (ACM)

User selectable asymmetrical modulations from QPSK to 1024QAM

XPIC cross-polarization interference cancellation

ANSI and ETSI channel bandwidths selections

Intuitive web-based GUI for remote

### **Typical Applications**

Studio-to-Transmitter Links (STL)

Transmitter-to-Studio Links (TSL)

Inter-city Relay Backhaul (ICR)

Multi-hop Microwave Relay Systems

High capacity IP Microwave Systems

Ideal for ATSC1.0/3.0 Lighthouse applications

## **V-IPLink Datasheet**



Technical Specifications	
RF Parameters	
Frequency Bands	<ul> <li>1.9-2.7GHz</li> <li>3.7-4.2GHz</li> <li>4.4-4.9GHz</li> <li>5.2-5.9GHz</li> <li>5.9-6.4GHz</li> <li>6.4-7.2GHz</li> <li>6.8-7.4GHz</li> <li>7.1-7.9Ghz</li> <li>7.7-8.5GHz</li> <li>10-10.7GHz</li> <li>11.7-12.4GHz</li> <li>12.7-13.3GHz</li> <li>14.25-14.5GHz</li> <li>18GHz</li> <li>23GHZ</li> </ul>
RF Output Level - Single Carrier	<ul> <li>+39 dBm QPSK Modulation (3-14.5GHz)</li> <li>+33 dBm QAM Modulation (3-14.5GHz)</li> <li>+36 dBm QPSK Modulation (2GHz)</li> <li>+33 dBm QAM Modulation (2GHz)</li> </ul>
RF Output Level - COFDM	<ul> <li>+27.5 dBm (3-14.5GHz)</li> <li>+32.5 dBm (2GHz)</li> </ul>
Data Transport Parameters	
Modulations	QPSK, 16QAM, 64QAM, 128QAM, 256QAM, 512QAM, 1024QAM
Throughput Capacity	<ul> <li>15 - 452 Mbps</li> <li>Automatic Transmitter Power Control (ATPC)</li> <li>Adaptive Code Modulation ACM(hitless 0ms)</li> </ul>



## **V-IPLink Datasheet**



ODU Output InterfaceN Type Female Connector (CMPL) (Wayeguide Flange PDR4 (WR12) (8 CH2) (Wayeguide Flange PDR4 (WR12) (8 CH2) (Wayeguide Flange PDR4 (WR12) (18/23GH2)IDU Output InterfaceN Type Female Connector • TWC Femcal Connector • SMPTE 311 FitreInput Interface• N Type Female Connector • SMPTE 311 FitreIDU Input Interface• N Type Female Connector • SMPTE 311 FitreIDU Input Interface• SFP Module - ASI • SFP Module - ASI • SFP Module - ASI • SFP Module - ASIIDU Input Interface• SFP Module - ASI • SFP Module - ASI • SFP Module - ASI • SFP Module - ASIIDU Input Interface0 OptionalSTMT Port1ASI Packet Size18/204Local And Remote Management1 × 100/1000 Base T (RJ45)ASI Packet Size18/204Local And Remote Management2 × 1 DAASI Transmit2 × 1 DAASI Transmit100-2100 MasecPower-Power-Corperational Temp-33 - + 50 Degrees C (DDU)Stransperational Temp-33 - + 50 Degrees C (DDU)Stransperational Temp-40 - 720 Degrees C (DDU)Stransperational Temp-40 - 720 Degrees C (DDU)Stransperational Temp-40 - 720 Degrees C (DDU)Stransperational Temp-33 - + 50 Degrees C (DDU)Stransperational Temp-30 - + 50 Degrees C (DDU)Stransperational Temp-30 - + 50 Degrees C (DDU)Stransperational Temp-30 - + 70 Degrees C (DDU)Stransperational Temp-30 - + 50 Degrees C (DDU)Stransperational Temp	Output Interface	
Input InterfaceInput InterfaceODU Input Interface: N Type Female Connector : TNC Femcal Connector <br< td=""><td>ODU Output Interface</td><td><ul> <li>N Type Female Connector or Waveguide Flange PDR70 (WR137) (3/4/5/6/7GHz)</li> <li>Waveguide Flange PDR84 (WR112) (8 GHz)</li> <li>Waveguide Flange UBR120 (WR75) (10/12/13/14GHz)</li> </ul></td></br<>	ODU Output Interface	<ul> <li>N Type Female Connector or Waveguide Flange PDR70 (WR137) (3/4/5/6/7GHz)</li> <li>Waveguide Flange PDR84 (WR112) (8 GHz)</li> <li>Waveguide Flange UBR120 (WR75) (10/12/13/14GHz)</li> </ul>
ODU Input InterfaceN Type Female Connector 	IDU Output Interface	TNC Femcal Connector
Int C Fencal ConnectorIDU Input Interface: SFP Module - ASI : SFP Module - ETH (copper or Fibre)User Interface ParametersEthernet Port Via SFP6 Gigabit Eth Ports (RJ45)XPICOptionalSTM-1 Port1ASI Port Via SFP4ASI Port Via SFP1ASI Port Via SFP4ASI Port Via SFP1ASI Port Via SFP1ASI Port Via SFP1ASI Port Via SFP4ASI Port Via SFP1ASI Port Via SFP2×1 DAASI Transmit2×1 DAASI Receive2×1 A/B typ 40msecEthernet TCP/IP Switch600-1100msecSystem Mangement1+1 with Space diversityPowerAC10-240VACEnvironmental:33 - +50 Degrees C (DU)Storage Temp:33 - +50 Degrees C (DU)Storage Temp:40 - +70 Degrees C (DU)Storage Temp:30 - mx 480mm x 90mm (L x W x H)Weight4KgMechanical Specification DU:20 - mx 150mm x 120mm (L x W x H)	Input Interface	
Local Description• SFP Module - ETH (copper or Fibre)User Interface ParametersEthernet Port Via SFP6 Gigabit Eth Ports (RJ45)XPICOptionalSTM-1 Port1ASI Packet Size188/204Local And Remote Management1 ×100/1000 Base T (RJ45)Hot-Standby2 ×1 DAASI Transmit2 ×1 DAASI Receive2 ×1 A/B typ 40msecEthernet TCP/IP Switch600-1100msecSystem Mangement1 ×1 with Space diversityPower1AC10-240 VACEnvironmental-33 - +50 Degrees C (DDU) - 5 - +45 Degrees C (DDU)Storage Temp-40 - +70 Degrees C (DDU)HumidityMax 95% non condensingMechanical Specification DDU30mm x 480mm x 90mm (L x W x H)Veight4KgSize270mm x 150mm x 120mm (L x W x H)	ODU Input Interface	TNC Femcal Connector
Ethernet Port Via SFP6 Gigabit Eth Ports (RJ45)XPICOptionalSTM-1 Port1ASI Port Via SFP4ASI Packet Size188/204Local And Remote Management1 × 100/1000 Base T (RJ45)Hot-StandbyASI Transmit2 × 1 DAASI Receive2 × 1 DAState Steve600-1100msecSystem Mangement1+1 with Space diversityPowerAC10-240VACEnvironmental-33 - +50 Degrees C (DU) -5 - +45 Degrees C (DU)Storage Temp-40 - +70 Degrees C (DU) -5 - +45 Degrees C (DU)Storage Temp-40 - 470 Degrees C (DU)Mechanical Specification IDU330mm x 480mm x 90mm (L x W x H)Weight4KgMechanical Specification ODU270mm x 120mm (L x W x H)	IDU Input Interface	
XPICOptionalSTM-1 Port1ASI Port Via SFP4ASI Packet Size188/204Local And Remote Management1 × 100/1000 Base T (RJ45)Hot-StandbySI Transmit2 × 1 DAASI Receive2 × 1 A/B typ 40msecEthernet TCP/IP Switch600-1100msecSystem Mangement110-240VACFoverAC10-240VACEnvironmental-33 - +50 Degrees C (DDU)Storage Temp-40 - 70 Degrees C (DDU)Storage Temp-40 - 70 Degrees C (DDU)Size330mm x 480mm x 90mm (L x W x H)Weight4KgMechanical Specification ODUStoram x 150mm x 120mm (L x W x H)	User Interface Parameters	
STM-1 Port1ASI Port Via SFP4ASI Packet Size188/204Local And Remote Management1 × 100/1000 Base T (RJ45)Hot-StandbyHot-Standby2 × 1 DAASI Transmit2 × 1 DAASI Receive2 × 1 A/B typ 40msecEthernet TCP/IP Switch600-1100msecSystem Mangement1+1 with Space diversityPowerAC110-240VACEnvironmental-5 × 445 Degrees C (DU) -5 × 445 Degrees C (DU) -5 × 445 Degrees C (DU)Storage Temp-40 + +70 Degrees C (DU) -5 × 445 Degrees C (DU)HumidityMax 95% non condensingMechanical Specification IDU330mm x 480mm x 90mm (L x W x H)Weight4KgMechanical Specification ODU270mm x 150mm x 120mm (L x W x H)	Ethernet Port Via SFP	6 Gigabit Eth Ports (RJ45)
ASI Port Via SFP4ASI Packet Size188/204Local And Remote Management1 × 100/1000 Base T (RJ45)Hot-StandbyASI Transmit2 × 1 DAASI Receive2 × 1 A/B typ 40msecEthernet TCP/IP Switch600-1100msecSystem Mangement1+1 with Space diversityPowerAC10-240VACEnvironmental-33 - +50 Degrees C (DDU) - 5 + 45 Degrees C (DDU) - 5 + 45 Degrees C (DDU)Storage Temp-40 - +70 Degrees C (DDU) - 5 + 45 Degrees C (DDU)HumidityMax 95% non condensingMechanical Specification DDU330mm x 480mm x 90mm (L x W x H)Weight4KgStorage Temp200mm x 150mm x 120mm (L x W x H)	XPIC	Optional
ASI Packet SizeI88/204Local And Remote Management1 × 100/1000 Base T (RJ45)Hot-StandbyASI Transmit2 × 1 DAASI Receive2 × 1 A/B typ 40msecEthernet TCP/IP Switch600-1100msecSystem Mangement1+1 with Space diversityPowerAC100-240VACEnvironmental-33 - +50 Degrees C (ODU) - 5 - +45 Degrees C (IDU)Storage Temp-40 - +70 Degrees C (ODU) - 5 - +45 Degrees C (IDU)HumidityMax 95% non condensingMechanical Specification IDU4KgSize330mm x 480mm x 90mm (L x W x H)Weight4KgMechanical Specification ODU270mm x 150mm x 120mm (L x W x H)	STM-1 Port	1
Local And Remote Management1 × 100/1000 Base T (RJ45)Hot-StandbyHot-StandbyASI Transmit2 × 1 DAASI Transmit2 × 1 DAASI Receive2 × 1 A/B typ 40msecEthernet TCP/IP Switch600-1100msecSystem Mangement1+1 with Space diversityPowerAC110-240VACEnvironmentalOperational Temp33 - +50 Degrees C (ODU) - 5 - +45 Degrees C (IDU)Storage Temp-40 - +70 Degrees C (ODU) - 5 - +45 Degrees C (IDU)HumidityMax 95% non condensingMechanical Specification IDUSizeSize330mm x 480mm x 90mm (L x W x H)Weight4KgImage: Storage Temp470 Degrees C (DU) + 100 Degrees C (DU)Size320 Degrees C (DU)Size <th< td=""><td>ASI Port Via SFP</td><td>4</td></th<>	ASI Port Via SFP	4
Hot-StandbyASI Transmit2 × 1 DAASI Receive2 × 1 A/B typ 40msecEthernet TCP/IP Switch600-1100msecSystem Mangement1+1 with Space diversityPowerAC10-240VACEnvironmentalOperational Temp-33 - +50 Degrees C (DDU) -5 - +45 Degrees C (DDU) -5 - +45 Degrees C (DDU)Storage Temp-40 - +70 Degrees C (DDU) -5 - #45 Degrees C (DDU)HumidityMax 95% non condensingMechanical Specification IDU330mm x 480mm x 90mm (L x W x H)Weight4KgMechanical Specification ODU270mm x 150mm x 120mm (L x W x H)	ASI Packet Size	188/204
ASI Transmit2 × 1 DAASI Receive2 × 1 A/B typ 40msecEthernet TCP/IP Switch600-1100msecSystem Mangement1+1 with Space diversityPower-AC110-240VACEnvironmental-33 - +50 Degrees C (DDU) -5 - +45 Degrees C (IDU)Operational Temp-33 - +50 Degrees C (DDU) -5 - +45 Degrees C (DDU)Storage Temp-40 - +70 Degrees C (DDU)HumidityMax 95% non condensingMechanical Specification IDU30mm x 480mm x 90mm (L x W x H)Weight4KgMechanical Specification ODU270mm x 150mm x 120mm (L x W x H)	Local And Remote Management	1 × 100/1000 Base T (RJ45)
ASI Receive2 × 1 A/B typ 40msecASI Receive2 × 1 A/B typ 40msecEthernet TCP/IP Switch600-1100msecSystem Mangement1+1 with Space diversityPower-AC110-240VACEnvironmental-Operational Temp-33 - +50 Degrees C (ODU) - 5 - +45 Degrees C (IDU)Storage Temp-40 - +70 Degrees C (ODU) - 5 - +45 Degrees C (IDU)HumidityMax 95% non condensingMechanical Specification IDU-Size330mm x 480mm x 90mm (L x W x H)Weight4KgMechanical Specification ODU-Size270mm x 150mm x 120mm (L x W x H)	Hot-Standby	
Ethernet TCP/IP Switch600-1100msecSystem Mangement1+1 with Space diversityPower-AC110-240VACEnvironmental-Operational Temp-33 - +50 Degrees C (ODU) -5 - +45 Degrees C (IDU)Storage Temp-40 - +70 Degrees C (ODU) -5 - +45 Degrees C (ODU)HumidityMax 95% non condensingMechanical Specification IDU330mm x 480mm x 90mm (L x W x H)Size330mm x 480mm x 90mm (L x W x H)Weight4KgMechanical Specification ODU270mm x 150mm x 120mm (L x W x H)	ASI Transmit	2 × 1 DA
System Mangement1+1 with Space diversityPowerAC110-240VACEnvironmentalOperational Temp-33 - +50 Degrees C (ODU) -5 - +45 Degrees C (IDU)Storage Temp-40 - +70 Degrees C (ODU) Max 95% non condensingMechanical Specification IDUSize330mm x 480mm x 90mm (L x W x H)Weight4KgMechanical Specification ODUSize270mm x 150mm x 120mm (L x W x H)	ASI Receive	2 × 1 A/B typ 40msec
PowerAC110-240VACEnvironmental-33 - +50 Degrees C (ODU) -5 - +45 Degrees C (IDU)Operational Temp-33 - +50 Degrees C (ODU) -5 - +45 Degrees C (IDU)Storage Temp-40 - +70 Degrees C (ODU)HumidityMax 95% non condensingMechanical Specification IDU330mm x 480mm x 90mm (L x W x H)Size330mm x 480mm x 90mm (L x W x H)Weight4KgMechanical Specification ODU270mm x 150mm x 120mm (L x W x H)	Ethernet TCP/IP Switch	600-1100msec
AC110-240VACEnvironmental-33 - +50 Degrees C (ODU) -5 - +45 Degrees C (IDU)Operational Temp-33 - +50 Degrees C (ODU) -5 - +45 Degrees C (IDU)Storage Temp-40 - +70 Degrees C (ODU)HumidityMax 95% non condensingMechanical Specification IDU30mm x 480mm x 90mm (L x W x H)Size330mm x 480mm x 90mm (L x W x H)Weight4KgSize270mm x 150mm x 120mm (L x W x H)	System Mangement	1+1 with Space diversity
Environmental-33 - +50 Degrees C (ODU) -5 - +45 Degrees C (IDU)Storage Temp-40 - +70 Degrees C (ODU)HumidityMax 95% non condensingMechanical Specification IDU-330mm x 480mm x 90mm (L x W x H)Size330mm x 480mm x 90mm (L x W x H)Weight4KgSize270mm x 150mm x 120mm (L x W x H)	Power	
Operational Temp       -33 - +50 Degrees C (ODU) -5 - +45 Degrees C (IDU)         Storage Temp       -40 - +70 Degrees C (ODU)         Humidity       Max 95% non condensing         Mechanical Specification IDU       330mm x 480mm x 90mm (L x W x H)         Size       330mm x 480mm x 90mm (L x W x H)         Weight       4Kg         Size       270mm x 150mm x 120mm (L x W x H)	AC	110-240VAC
-5 - +45 Degrees C (IDU)Storage Temp-40 - +70 Degrees C (ODU)HumidityMax 95% non condensingMechanical Specification IDU330mm x 480mm x 90mm (L x W x H)Size330mm x 480mm x 90mm (L x W x H)Weight4KgSize270mm x 150mm x 120mm (L x W x H)	Environmental	
Humidity     Max 95% non condensing       Mechanical Specification IDU     330mm x 480mm x 90mm (L x W x H)       Size     330mm x 480mm x 90mm (L x W x H)       Weight     4Kg       Mechanical Specification ODU     270mm x 150mm x 120mm (L x W x H)	Operational Temp	
Mechanical Specification IDU       Size     330mm x 480mm x 90mm (L x W x H)       Weight     4Kg       Mechanical Specification ODU     270mm x 150mm x 120mm (L x W x H)	Storage Temp	-40 - +70 Degrees C (ODU)
Size     330mm x 480mm x 90mm (L x W x H)       Weight     4Kg       Mechanical Specification ODU     270mm x 150mm x 120mm (L x W x H)	Humidity	Max 95% non condensing
Weight     4Kg       Mechanical Specification ODU     270mm x 150mm x 120mm (L x W x H)	Mechanical Specification IDU	
Mechanical Specification ODU       Size     270mm x 150mm x 120mm (L x W x H)	Size	330mm x 480mm x 90mm (L x W x H)
Size         270mm x 150mm x 120mm (L x W x H)	Weight	4Kg
	Mechanical Specification ODU	
Weight 5Kg	Size	270mm x 150mm x 120mm (L x W x H)
	Weight	5Kg

E: sales@vislink.com T: +1 908 852 3700 / + 44 1442 431300 www.vislink.com

© Copyright 2025 Vislink LLC and Vislink Poway LLC are Vislink Technologies, Inc. companies. All rights reserved. All other products or services referenced herein are identified by the trademarks or service marks of their respective companies or organizations. We reserve the right to change specifications without notice. Where applicable, versions of this device may not have been approved by the Federal Communications Commission (FCC). Where applicable, these versions are not offered for sale or lease until approval of the FCC has been obtained.