

HLN 2.5 ITFS Down-Converter Solution *For ITFS or Commercial MMDS Applications*

ITFS system operators have a new choice for new installations and replacement downconverters. The HLN 2.5 commercial quality down-converter fulfills today's ITFS needs by addressing immediate requirements for spares and replacements to existing receive sites. Industry consolidation has left the ITFS market with few choices in new custom products supporting operational systems. The HLN 2.5 addresses this need with complete flexibility in bandwidth, gain and input/output frequencies. The first truly new design in years has updated technology to increase reliability and flexibility for custom frequency plans to meet your system needs. Available in a single group or full bandwidth options, the HLN2.5 series ITFS downconverter will keep your receive site customers operational for years to come. This unit replaces the Conifer HLN Series 1 and 2 converters which have been the ITFS industry standard for many years.

State-of-the-Art Design Techniques Utilizing

- **Embedded Microprocessor Control**
- **DSP Technology**

Features and Benefits

- **Ruggedized** powder coated aluminum case with stainless steel hardware provides years of corrosion free service in harsh environments
- **Sophisticated** power supply system utilizes switching technology to mitigate voltage sensitivity and lightning damage. It also provides for long IF cable runs and short circuit protection.
- **Available** in wide-band or single group bandwidth
- **Custom** output frequencies available
- **Gain and Noise Figure** options available to meet your requirements
- **Compatible** with QAM, VSB, and Analog signals
- **OptiMode™** Interference Rejection Circuitry



Product Specifications

Specifications

HLN-2.5

Input Frequency	2500MHz-2686MHz
Bandwidth Options	186MHz Bandwidth 48MHz Bandwidth (A/B, C/D, E/F, G/H)
Output Frequency (Available at time of order)	54-450MHz
Gain	40dB (Max)
Gain Flatness	±2dB over Bandwidth
Maximum Output Power	+25dBm/Channel @ 31 channels +33dBm/Channel @ 4 channels +41dBm/Single Channel
Noise Figure	4.5dB typical
Group Delay	± 10 ns over any 6 MHz channel
LO Frequency Stability	± 10 KHz set point ± 30 KHz -40°C to +60°C
LO Phase Noise	> -60 dBc/Hz @ 100Hz > -80 dBc/Hz @ 1 KHz > -88 dBc/Hz @ 10 KHz > -105 dBc/Hz @ 100 KHz
IF Rejection	80 dB minimum
Third Order IM (two tone test)	- 50dBc w/ two -10dBm tones @ output
Output Impedance	75 Ohms
Output Connector	F-type female
LNB Return Loss	10 dB minimum
Temperature	-40 to +60 degrees C
Supply Voltage	16-24VDC
Supply Current	<300mA
Lightning Protection / Surge Protection	Transient voltage suppression at RF input must exceed 1500 Watts @ 1 mS w/ < 1 nS response time
Input Connector	"N" Type Female
Input AC Voltage (to Power Inserter)	90-240VAC (Switching Supply)
Converter Dimensions (w/o Bracket or Connectors)	H: 8.92" W: 4.97" D: 1.65"

Specifications and prices are subject to change without notice

Conifer Wireless
1635 W. 12th Place
Tempe, AZ 85281, USA
Phone 480-315-1501
www.coniferusa.com

