GI FibreMDU

Twin and Quad Optical Converters

global invacom
completing the picture

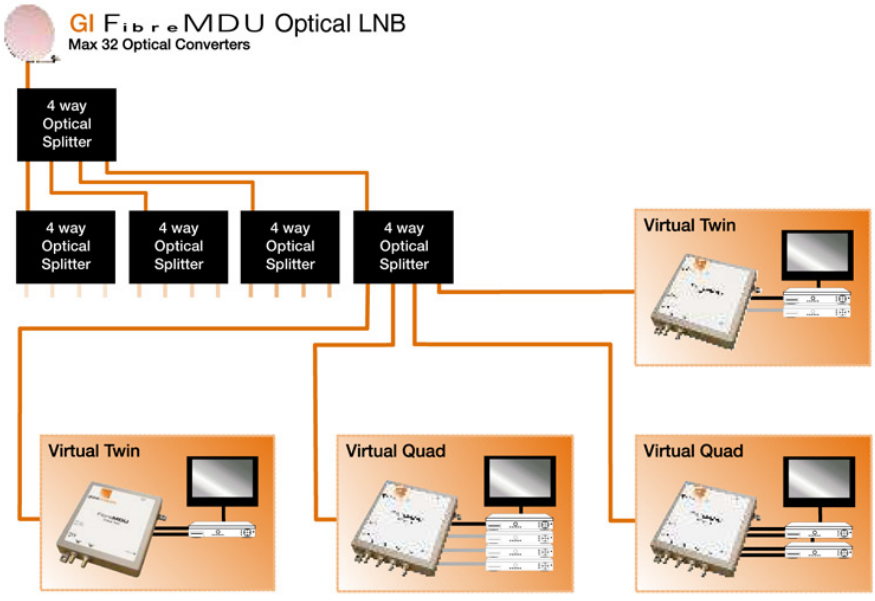
- Converts optical signals from a GI FibreMDU Optical LNB to IF
- Provides up to 2/4 Universal Satellite feeds from 1 Fibre Optic connection
- Plug and Play
- Powered via the STB

The GI FibreMDU converters have been developed for use in conjunction with the GI Optical Output LNB either via a Passive Optical Network (PON) or direct connection to the GI Optical Output LNB, with attenuation.

Each of the GI FibreMDU converters have been developed to replicate a specific type of LNB, Twin, Quad or Quattro providing signal output to the satellite receiver in exactly the same way as if it were connected directly to a standard universal LNB, negating any need for costly software development for either the broadcaster or the receiver manufacturer.

Each of the GI FibreMDU Converters receives the optically modulated frequency stacked signals from the GI Optical Output LNB or PON typically via a 3mm fibre optic cable (GI 3.0 Steel Armoured Fibre) utilising the FC/PC connector.

The optical signals are then converted back to their original IF format and output to the receiver via standard F connections making in home installations simple and trouble free. Both the Twin & Quad GI FibreMDU Converters are receiver powered enabling them to be located almost anywhere in the home.



Specifications

Input Parameters

Parameter	MIN	MAX
RF Frequency Range	950 - 5450 MHz	
Optical RLR	20 dB	
Optical Power SML PON Setting STD PON Setting	 -13 dBm -18 dBm	 0 dBm -14 dBm
Aggregate Equivalent RF Power	-60 dBm	-20 dBm
Nominal SAT Transponder Levels Max. level corresponds to min. optical loss. Min level corresponds to max. optical loss. Figures are for typical transponder and exclude LNB ripple and incoming transponder to transponder level differences	-80 dBm	-40 dBm
SAT Transponders		120

Legacy Output Parameters

Parameter	MIN	MAX
RF Frequency Range Horizontal High Band Vertical High Band Horizontal Low Band Vertical Low Band	 1100 - 2150 MHz 1100 - 2150 MHz 950 - 1950 MHz 950 - 1950 MHz	
Nominal Impedance	75 Ohm	
Return Loss	10 dB	
Gain Ripple Across Band		5 dB
Gain Ripple Across 30 MHz		1 dB
Nominal Output Level (per transponder)	-65 dBm	-25 dBm
Noise Fig. @ Max. Gain		4 dB
OIP3	+5 dBm	
Isolation (Unwanted path to select path)	30 dB	
In Band Spurious Power	-25 dBc	
Out of Band Spurious Power		-60 dBm
LO Power		-50 dBm
Integrated Phase Noise Integrated from 1KHz to 13MHz or Astra LNB specification based on spot frequencies		4° RMS
Power Consumption (mA at 12V) Twin and Quad Versions to be supplied from STB Hence requires immunity to the 13 - 21V tone and volts signaling. Quatro version to be powered by separate PSU.	<330 mA	

Switching V/T on Satellite Receiver Ports

Pol/Band	Specification
HH	>15.5V, 22 kHz
HL	>15.5V
VH	<14.5V, 22 kHz
VL	<14.5V
22kHz Tone Frequency	22 ± 4 kHz
22kHz Tone Duty Cycle	50 ± 20%
22kHz Tone Amplitude	700 ± 300mV pp

Environmental

Temperature	
Operating	0 to 50°C
Storage	-10 to 50°C

EMC Conformance to EEC Standard : EN50083-2

Safety Conformance to EEC Directive : 73/23/EEC
Conformance to RoHS EEC Directive

GI FibreMDU

Quatro Optical Converter

- Converts optical signals from a Fibre Optic LNB to IF
- Supplies 4 fixed output Satellite feeds from 1 Fibre Optic connection
- Plug and Play
- PSU included

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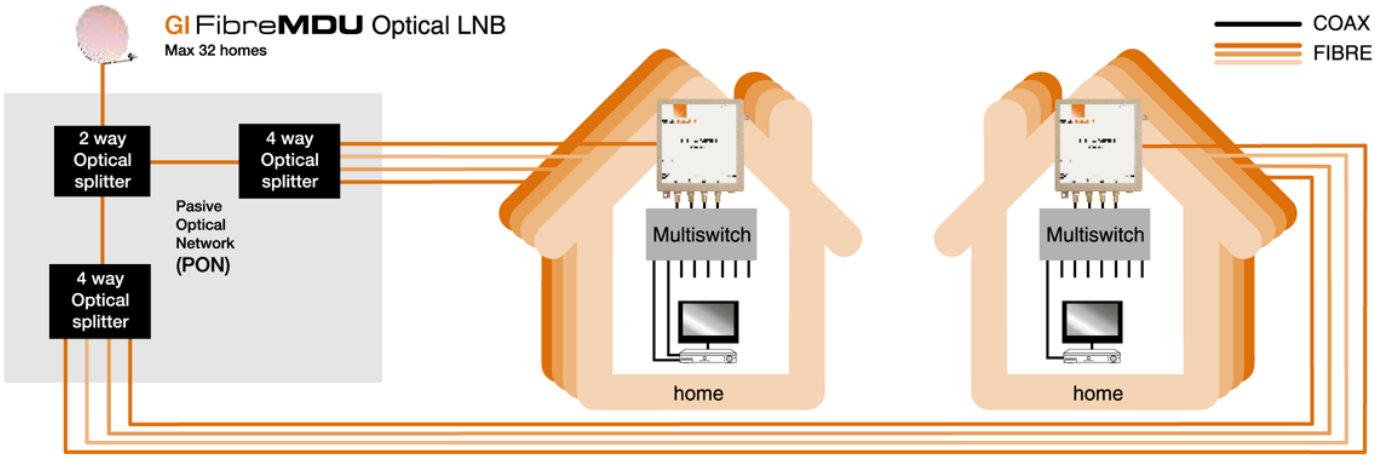
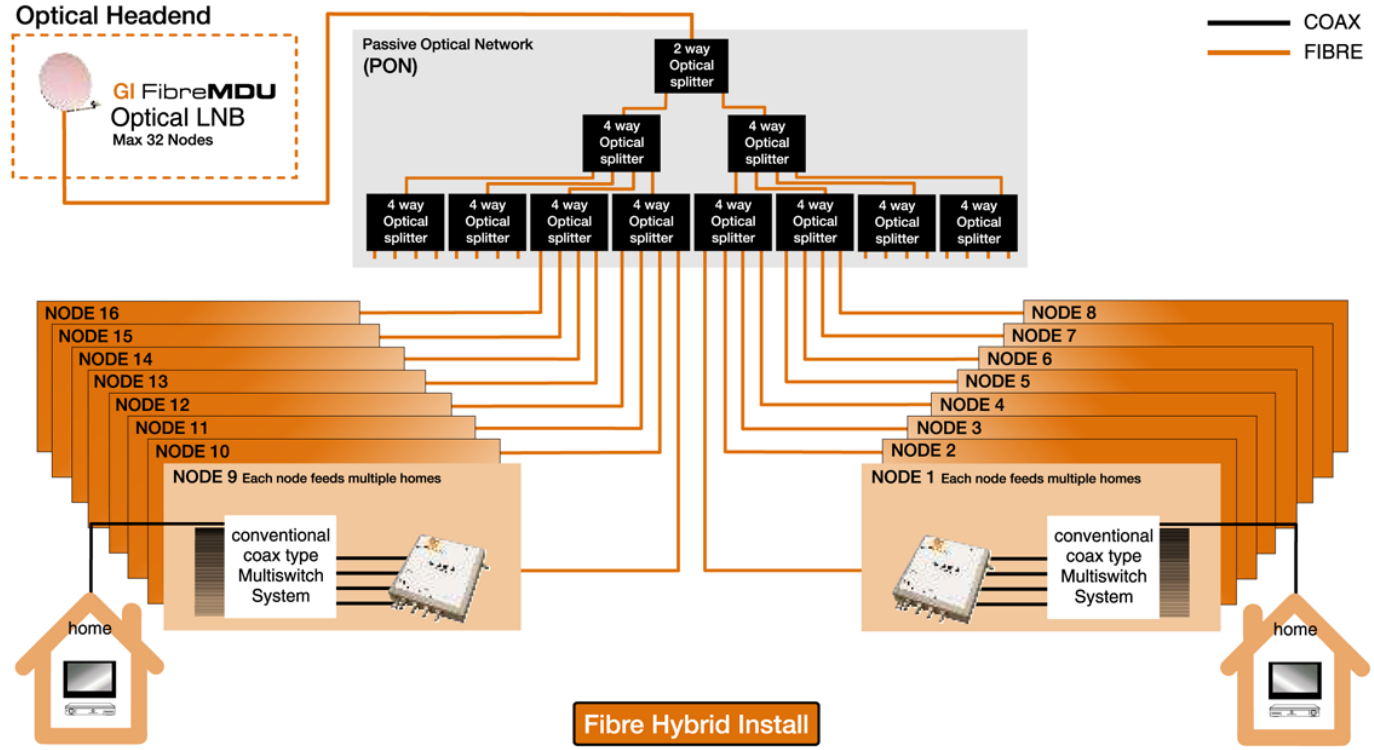
Unlike the Twin & Quad Converters the Quattro Outputs the IF signals on 4 fixed polarities making direct connection to Multiswitch systems simple, thus providing the installer with the ability to create almost any size hybrid network.



Fibre to the Home



Fibre Hybrid Install