

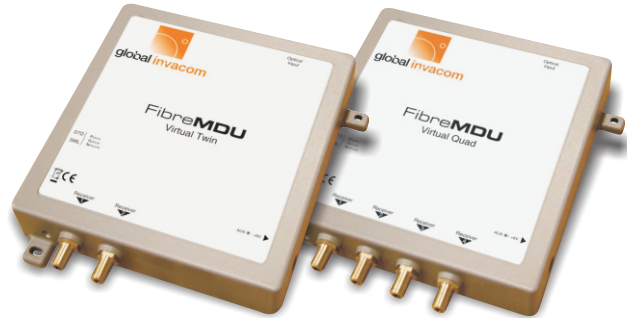
GI FibreMDU

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



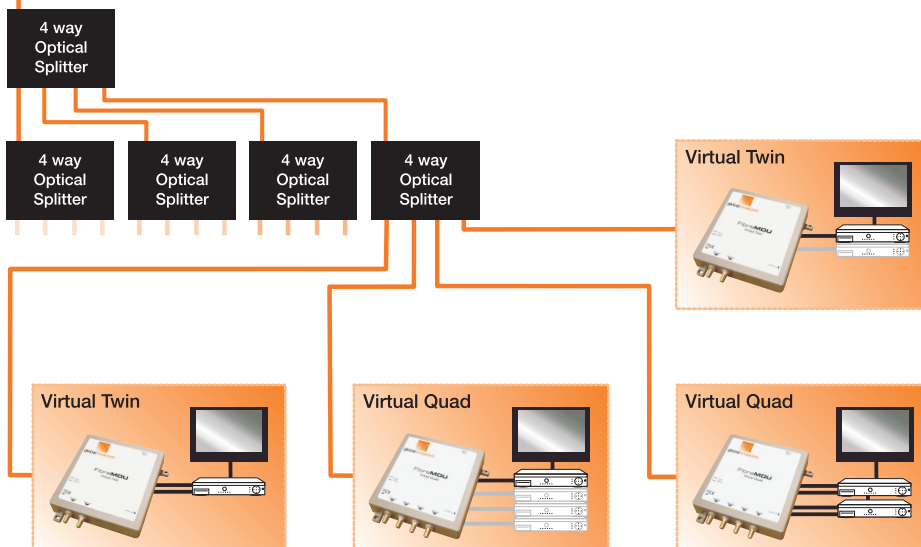
The **GI FibreMDU** converters have been developed for use in conjunction with the **GI** Optical Output LNB either via a Passive Optical Network (PON) or direct connection to the **GI** Optical Output LNB, with attenuation.

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.

GI FibreMDU Optical LNB Max 32 Optical Converters



Specifications

Input Parameters

Parameter	MIN	MAX
RF Frequency Range	950 - 5450 MHz	
Optical RLR	20 dB	
Optical Power		
SML PON Setting	-13 dBm	0 dBm
STD PON Setting	-18 dBm	-14 dBm
Aggregate Equivalent RF Power	-60 dBm	-20 dBm
Nominal SAT Transponder Levels	-80 dBm	-40 dBm
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		
SAT Transponders		120

Legacy Output Parameters

Parameter	MIN	MAX
RF Frequency Range		1100 - 2150 MHz
Horizontal High Band		1100 - 2150 MHz
Vertical High Band		950 - 1950 MHz
Horizontal Low Band		950 - 1950 MHz
Vertical Low Band		
Nominal Impedance		75 Ohm
Return Loss	10 dB	
Gain Ripple Across Band		4 dB
Gain Ripple Across 30 MHz		1 dB
Nominal Output Level (per transponder)	-65 dBm	-25 dBm
Noise Fig. @ Max. Gain		65 dB
OIP3	+10 dBm	
Isolation (Unwanted path to select path)	30 dB	
In Band Spurious Power	-25 dBm	
Out of Band Spurious Power		-60 dBm
LO Power		-60 dBm
Integrated Phase Noise		4° RMS
Integrated from 1KHz to 13MHz or Astra LNB specification based on spot frequencies		
Power Consumption (mA at 12V)		<300 mA
Twin and Quad Versions to be supplied from STB Hence requires immunity to the 13 - 21V tone and volts signaling. Quattro version to be powered by separate PSU.		

Switching V/T on Satellite Receiver Ports

Pol/Band	Specification
HH	>15.5V, 22 kHz
HL	>15.5V
VH	>13.5V, 22 kHz
VL	>13.5V
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

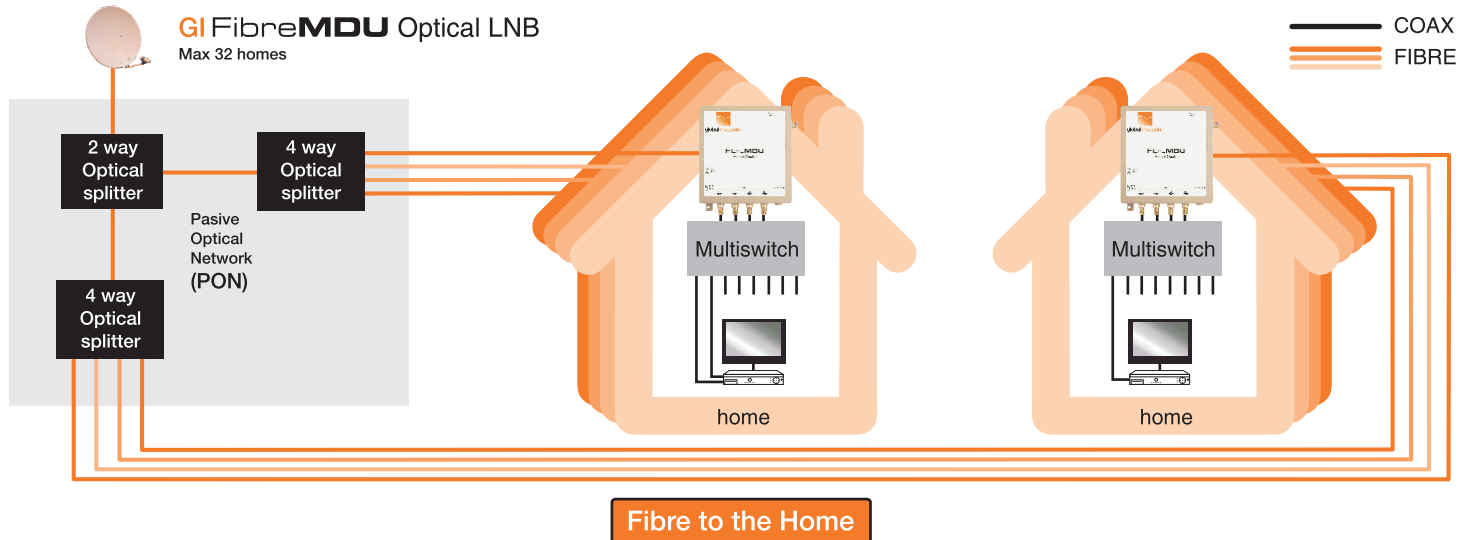


The GI FibreMDU converters have been developed for use in conjunction with the GI FibreMDU Optical Output LNB either via a Passive Optical Network (PON) or direct connection to the Optical LNB, with attenuation.

Each of the GI FibreMDU converters have been developed to replicate a specific type of LNB, Twin, Quad or Quatro 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, all receiver configurations remain the same.

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

Unlike the Twin & Quad Converters the Quatro 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.



Optical Headend

