

Unifiber™

1310nm Optical LNB with 10.40\10.41GHz LO

IDLF-OPL410-1314X-OPR

Item:6286, 6295

User manual

Product description

Wideband 40 mm low noise down converter units 6286, 6295 are dedicated for operation with the Inverto Unifiber optical receivers in satellite-only installations that do not require distribution of DTT signal.

Safety instructions

- Installation of the products must be done according IEC60728-11 and national safety standards.
- The products are powered from 10 - 20 V DC. This voltage is not dangerous to life.
- Any repairs must be done by a skilled personnel.
- Power supply must have a short circuit protection.



This product complies with the relevant clauses of the European Directive 2002/96/EC. The unit must be recycled or discarded according to applicable local and national regulations.



This product is in accordance to following norms of EU: EMC norm EN50083-2, safety norm EN62368-1 and RoHS norm EN50581.



This product is in accordance with Custom Union Technical Regulations: "Electromagnetic compatibility of technical equipment" CU TR 020/2011, "On safety of low-voltage equipment" CU TR 004/2011.



This product is in accordance with the UK Radio Equipment Regulations 2017, Electrical Equipment (Safety) Regulations 2016 & Electromagnetic Compatibility Regulations 2016. Designated standards: EN303372-2, EN55032, EN55035, EN 62368. The full text of the UKCA declaration of conformity is available at: www.inverto.tv/support_dc



This product is in accordance with safety standard AS/NZS 60065: 2012 and EMC standards of Australia.

External view of 6286 / 6295

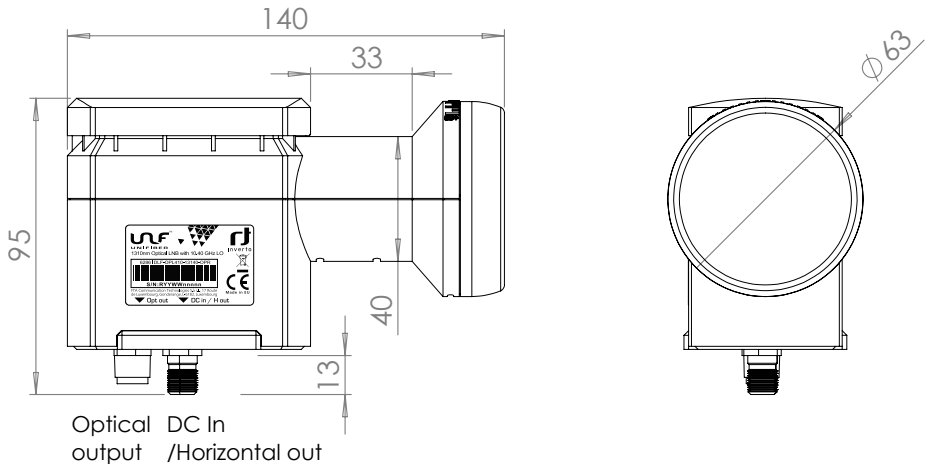
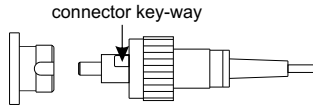


Figure 1. External view of the LNB

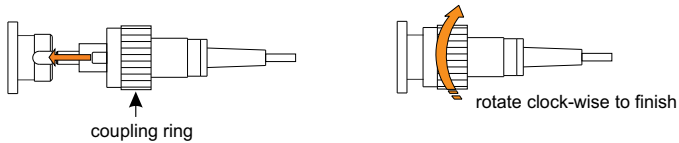
Optical connections

Note: All optical connectors and adapters should be cleaned before connecting them. If optical reception power of the receiver decrease, fiber connection should be cleaned and maintained. Reel cleaners or prepackaged lint free wipes or swabs with alcohol are the most convenient means of cleaning optical connectors. Fiber connectors should never be left uncovered.

1. Align the FC/UPC connector key-way (type R) with the acceptable key-way.



2. Push firmly to locate the key-ways and then rotate the coupling ring.



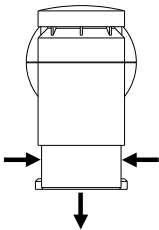
3. Guard the minimum recommended bending radius of fiber cables which is 30 mm.

Installation instructions

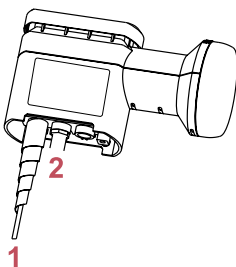
- Read the safety instruction first.
- For outdoor installation.
- For LNB and dish adjustment use RF test output at DC IN connector (Figure 1).
- Dish alignment can be carried out using the Horizontal polarization SAT IF signal (wideband). The signal is AGC controlled so dish alignment should be based on maximum MER level measuring.

Optical cable installation instruction

We recommend to use relatively bigger dishes for ensure better MER value of the transmitted signals.




1. Take off the connectors cover by pressing its sides and pulling downward.



2. Insert the optical cable [1] in to the appropriate hole of the connectors cover.
3. Install the optical cable connector on the LNB adapter.
4. Remove protective film from insulation tape.
5. Roll the insulation tape on the optical connector (the side of the tape is not important).
6. Push connectors cover back on the LNB.

Requirements for external power supply unit (PSU)

- Output voltage +20 V ± 1 V
- Output current Recommended to use PSU with 50%
extra power reserve
- Ripple at single and/or double mains frequency < 10 mV p-p
- Ripple & noise < 200 mV p-p
- Double insulated (marked )
- Meet EN 55022 class B conducted emissions requirements, measuring with grounded load

* Reducer 5.5/2.1 to 3.5/1.3 mm is supplied with the product.

TECHNICAL SPECIFICATIONS

Type	6286 IDLF-OPL410-13140-OPR	6295 IDLF-OPL410-13141-OPR
Input frequency range	10.7-12.75 GHz	
Noise figure typical	0.7dB	
Wideband and DTT outputs	10.40 GHz	10.41 GHz
LO initial accuracy	± 500 kHz	
LO temperature drift	± 150 kHz	
LO phase noise	< -75 dBc/Hz@10 kHz	
Cross-pole isolation	22 dB	
Optical output	+4 dBm, 1310 nm, FC/UPC	
Main characteristics		
Supply voltage	10-20 V	
Power consumption	4 W max.	
Operating temperature range	-30° ~ +60° C	
Dimensions/Weight (packed)	141x89x63 mm/0.35 kg	



For purpose of brevity, some product descriptions in this sheet remain at platform level and may not be referred to as detailed datasheets of the products. Inverto Digital Labs reserves the right to amend, omit or add products, product-lines, and / or features without notice. As product specifications may change without notice, always contact Inverto to obtain the latest product specification sheets.

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