

Versa-Link System

The versatile Single RF channel, RF over Fiber System for LNBs, BUCs and more



TECHNICAL SPECIFICATIONS

MODEL:	Versa-Link Transmitter	Versa-Link Receiver
RF Frequency	290 - 2500 MHz (290-2350 MHz with F connectors), Optional 10-2500 MHz w/o 10 MHz ref. & Monitor output	
Input Level RF / Optical	-10 to -50 dBm @ 20 transponders	-6 dBm to +5 dBm
Optical Output / Input	1310 nm (1550 nm as option)	
Optical Output Power	2 mW	
System Gain Variation	± 0.20 dB within 30 MHz, ± 1 dB @ 950 - 2150 MHz, ± 1.5 dB @ 290 - 2500 MHz max. , ± 3 dB @ 10 - 2500 MHz	
RF gain	User adjustable, -10 dB to +10 dB, factory set 0dB @ 100 meter fiber cable	
System Noise Figure	20 dB typ. @ full gain	
IP3 RF Input / IP3 RF output	+33 dBm @ min. gain, +13 dBm @ max. gain	+30 dBm typ.
RF Return Loss / VSWR	N / SMA connector: min. 12 dB / 1.7:1, F connector: min. 8 dB / 2.3:1	
System C/N, Single Carrier	> 56 dB @ 30 MHz	
System C/N, 40 transponders	> 33 dB @ input level -15 dBm (composite level, full gain)	
SFDR	115 dB / Hz	
Fiber Connector	Dual fiber, Single mode Huber & Suhner, Q-ODC	
RF Connector	N-type 50 Ω	
RF Monitor Connector	SMA-type 50 Ω	
10 MHz	Diplexer built in, Insertion via SMA connector 50 Ω , n/a @ 10 - 2500 MHz RF range	
DC Feed	Standard 3 x 0,75 mm ² , 15 meter cable (pigtail) or via RF connector	
DC Input	+12 to +28 V	
Bias Tee for LNB / BUC DC Supply	4 A max with N-conn., 28 V DC max. out via RF out for BUC (External DC block optional), RF in connector for LNB	
Power Consumption	1 W max. (excl. LNB and BUC Power)	
Temperature Range	- 40° to + 80° C	
Dimensions	96 (L) x 91 (W) x 49 (H) mm, for drawing, see www.smw.se	
Weight	465 g (SMA- & F-connector), 480 g (N-connector)	
Protection Class	IP 67, Q-ODC connector only IP67 when mated with dust cover or Q-ODC cable connector	
Standards Compliance	Optical interface: EIA/TIA 568, ITU std. G.694.2; EMC: EN 55013:2013, EN 55020, EN 300 386; Safety: EN 60950-1, EN 60950-22, EN 60065:2002	
Options	Increased fiber distance (1550 nm laser), Customized frequency range, RF connector type F or SMA.	
Miscellaneous	Installed pigtail DC cable, 15 meters. Custom lengths available as option.	
Accessories	Outdoor to Outdoor fiber cables (Q-ODC to Q-ODC), Outdoor to indoor patch cables (different connector type and lengths), External 10 MHz ref. oscillator, Dual DC Inserter, Power Supply Unit (AC to DC), Custom DC cable length.	

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Features

- **Cost effective**
- **Wideband & Multi-role capability**
- **Outdoor proof IP67**
- **Stackable for Multi channel & VSAT applications**
- **Integrated Bias Tees for LNB and BUC power**
- **Integrated 10 MHz inserter for LNB and BUC**

High RF- and Optical performance

- 1 x L-band forward channel using a direct modulated DFB 1310 nm laser over a single fiber cable.
- Manually adjustable Gain for large antennas and Beacon applications.
- Up to 20 km single mode fiber cable distance depending on link budget. Link distance up to 40 km with optional 1550 nm laser.
- Free Link budget calculation support available on request.

Fully Outdoor Proof IP67

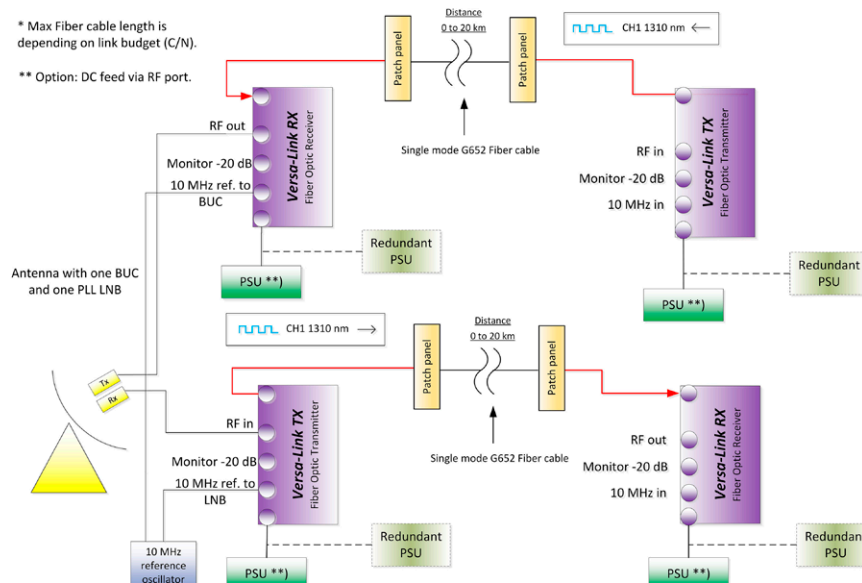
- Both Transmitter and Receiver unit packaged in a compact outdoor rugged aluminium enclosure.
- -40° to +80°C fully operating temperature range.
- Ideal to mount on the Satellite antenna or structure, without using a bulky separate outdoor enclosure.
- Highly rugged push on, quick connect, Q-ODC fiber connector on both units.

Versatility

- Multi role RF over Fiber link for LNB or BUC simply by swapping location of the receiver/transmitter pair.
- Easy DIN-rail mount option for multi-unit, multi channel and VSAT (LNB+BUC) stacking.
- Built in 4A (BUC/LNB) Bias-tee and 10MHz ref. diplexer. **)
- Versa-Link Rx receiver is compatible with SMW Fiber output LNBs for cost effective single channel systems.
- SMW Fiberoptics are compatible with many other manufacturer's corresponding indoor devices.

Applications

- Single fiber downlink connection from one LNB.
- Single fiber uplink connection to one BUC.
- Carries any 290 - 2500 MHz (option 10 - 2500 MHz) *, RF signal - Satcom, Terrestrial TV, GPS, FM etc.



NOTE: Fiber cables can be ordered as patch cables or Q-ODC to Q-ODC cable

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