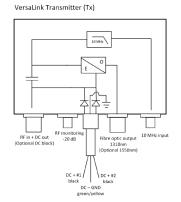
# **Versa-Link System**

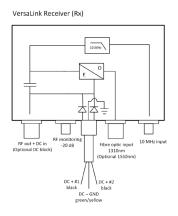


The versatile Single RF channel, RF over Fiber System for LNBs, BUCs and more









#### **TECHNICAL SPECIFICATIONS**

TECHNICAL SPECIFICATION		
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, ± 2.5 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 50Ω	
RF Monitor Connector	SMA-type 50Ω	
10 MHz	Diplexer built in, Insertion via SMA connector 50Ω, n/a @ 10 - 2500 MHz RF range	
DC Feed	Standard 3 x 0,75 mm², 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 (DC block optional), RF in connector for LNB	
Power Consumption	1 W max. (excl. LNB and BUC Power)	
Temperature Range	Storage and operating: - 40° to + 80° C	
Dimensions	96 (L) x 91 (W) x 49 (H) mm, for drawing, see <u>www.smw.se</u>	
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. G694.2; 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.	

Rev.12-20-5D

## Versa-Link System



#### **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**

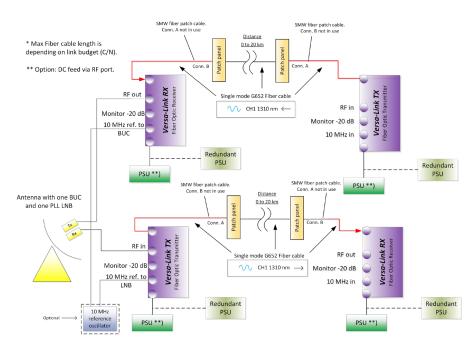
- Both Transmitter and Receiver unit packaged in a compact outdoor rugged aluminium enclosure.
- -40° to +80°C fully operating temperature range.
- Ideal to mount on the Satellite antenna or structure, without using a bulky separate outdoor enclosure.
- Highly rugged push on, quick connect, Q-ODC fiber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



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

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Above parameters are generic product family values. For part number specific min./max. values, please consult us. Specifications are subject to change without notice. Products from Swedish Microwave AB are made for commercial use.