

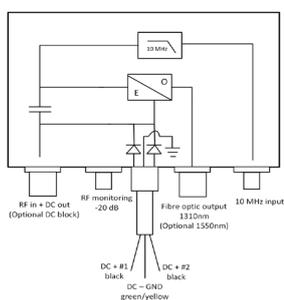
# Versa-Link

## Key features

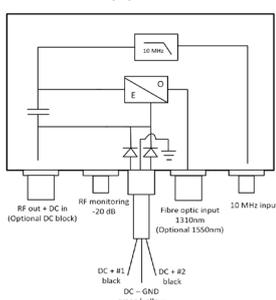


- High RF and Optical performance
- Fully analog (no field setup)
- Fully outdoor proof (IP 67)
- 1 RF channel 1310nm
- Up to 20 km distance (optional 40 km with 1550 nm)

VersaLink Transmitter (Tx)



VersaLink Receiver (Rx)



### Description

The Versa-Link contains one L-band forward channel over a single fiber using a direct modulated 1310 nm laser over a single mode fiber cable.

- Manually adjustable gain for large antennas and Beacon applications.
- Up to 20 km link distance with 1310 nm or as option up to 40km with 1550nm , depending on link budget, with very high C/N maintained.

### Fully Outdoor Proof, IP67

- Both the transmitter and the receiver unit packaged in a compact outdoor rugged aluminium enclosure.
- Ideal to mount on the satellite antenna or structure, without using a bulky separate outdoor enclosure.
- -40° to +80°C fully operating temp. range.
- 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 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.

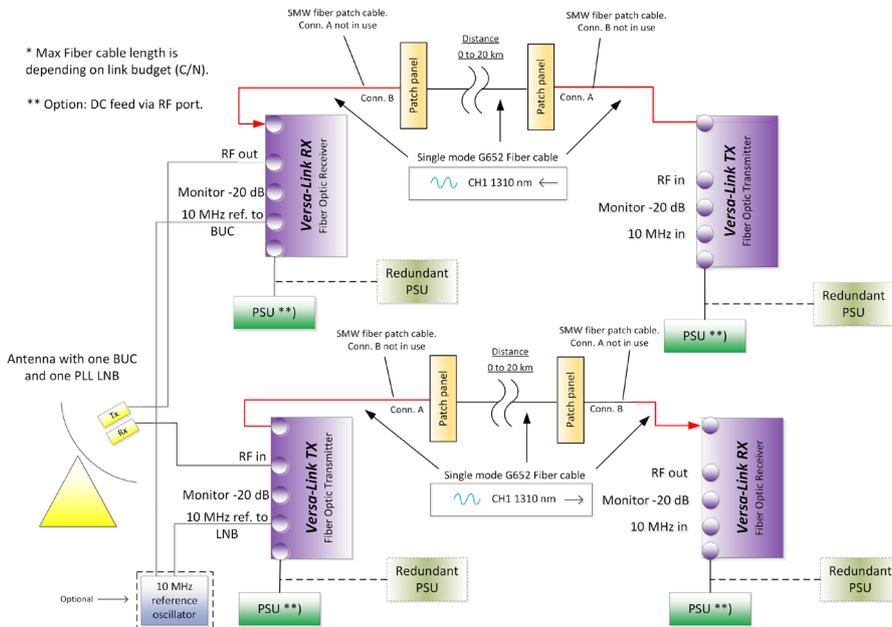
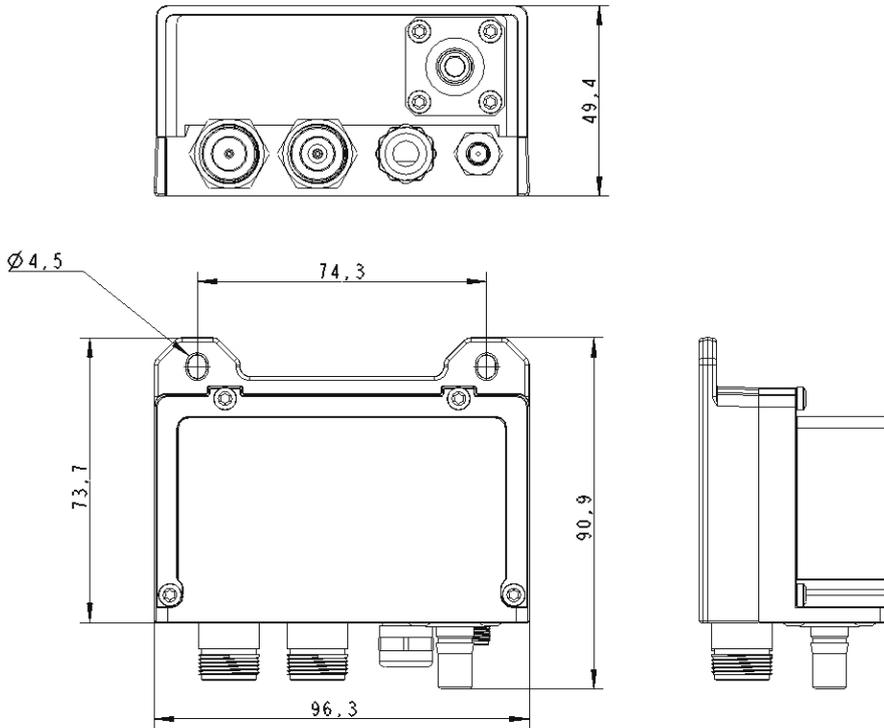
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## Technical specifications

	Fiber transmitter	Fiber receiver
GENERAL	RF Frequency	290 - 2500 MHz (290 - 2350 MHz with F connectors), Optional 10 - 2500 MHz w/o 10 MHz ref. & Monitor output
	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
	DC feed	Standard 3 x 0,75 mm2, 15 meter cable ( pigtail ) or via RF connector
	Power consumption	1 W max. (exclusive LNB/BUC power)
	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)
	Temperature Range	Storage and Operating -40 to +80°C, -40 to +176°F
	Ingress protection code	IP 67, Q-ODC connector only IP67 when mated with dust cover or Q-ODC cable connector
	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 max.
	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
Miscellaneous	Installed pigtail DC cable 15 meter. Custom length available as option.	
INPUT	Input level RF / Optical	-10 to -50 dBm @ 20 transponders -6 dBm to +5 dBm
	Input RF connector	F, N or SMA female
	Input connector optical	Dual fiber, Single mode Huber & Suhner, Q-ODC
	IP 3 RF input	+25 dBm typ.
	DC input	+12 to +28 Volt
	10 MHz input	Sinewave, -10 to + 5 dBm input via separate 10 MHz connector (SMA only).
INTERNAL	Optical interface	Direct modulated DFB laser, 1310nm (1550nm as option)
	RF gain Tx	User adjustable, -10 dB to +10 dB, factory set 0dB @ 100 meter fiber cable
	System noise figure	20 dB typ. @ full gain
	10 MHz Phase Noise	-123 dBc@100 Hz, -140 dBc@1kHz, -150 dBc@10kHz, -155 dBc@100 kHz
	System C/N Single carrier	> 56 dB @ 30 MHz
	System C/N 40 transponders	> 33 dB @ input level -15 dBm (composite level)
	SFDR	115 dB/Hz
OUTPUT	RF Return loss / VSWR	N / SMA connector: min. 12 dB / 1.7:1, F connector: min. 8 dB / 2.3:1
	10 MHz	Diplexer built in, Insertion via SMA connector 50Ω, n/a @ 10 - 2500 MHz RF range
	IP3 RF input / RF output	+33 dBm @ min. gain, +13 dBm @ max. gain +30 dBm typ.
	Optical output power	2 mW
	Output RF connector	F, N or SMA female
	Output connector optical	Dual fiber, Single mode Huber & Suhner, Q-ODC
OTHER	Cables	Outdoor to Outdoor fiber cables ( Q-ODC to Q-ODC ), Outdoor to indoor patch cables
	Power supply (AC/DC)	TDK Lambda +15VDC and +24 VDC
	Options	Increased fiber distance (1550 nm laser), Custom freq. range, Custom DC cable length

# Versa-Link

## Technical Drawing



Professional Satcom Frequency Converters & Components. All products are fully CE and RoHS compliant and every unit includes full documentation of performance tests and quality control. Please contact sales@smw.se to configure or customize the unit to your needs. Visit smw.se or scan QR code to see our full product range and request a quote.



Technical specifications are typical, for specific part number specifications, please contact us. Specifications are subject to change without prior notice. Products from Swedish Microwave AB are made for commercial use. Swedish Microwave AB | Dynamovagen 5 | S-591 61 Motala | Sweden | Contact: +46 141 21 61 35 | sales@smw.se | smw.se