# Fiber optic LNB-Link



The easy solution for converting an LNB to a fiber LNB







### **Features**

- Outdoor proof IP 67
- Wide temperature range -40 to +80° C
- Integrated Bias Tee for LNB power
- Compatible with standard 1310nm Fiber receivers
- Cost effective
- Very Low Phase Noise contribution
- Use with SMW VersaLink receiver

### **TECHNICAL SPECIFICATIONS**

MODEL:	LNB-Link Transmitter
RF Frequency	950 - 2150 MHz
Optical Output Wavelength	1310 nm
Optical Output Power	2 mW
System Gain Variation	± 0.20 dB within 30 MHz, ± 1 dB @ 950 - 2150 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
RF Input IP3	+33 dBm @ min. gain, +13 dBm @ max. gain
RF Return Loss	max8 dB / 2.3:1 with F connector
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	F-type 75 $\Omega$ , option N-Type 50 $\Omega$
RF Monitor Connector	F-type 75 $\Omega$ , option N-Type 50 $\Omega$
DC Feed connector	F-type, option N-Type
DC Input	+12 to +28 V
Bias Tee for LNB DC Supply	1 A, 28 V DC max. out via RF in connector for LNB
Power Consumption	1 W max. (excl. LNB Power)
Temperature Range	-Storage and operational: 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 with F-connectors, 480 g with N-connectors
Protection Class	IP 67, Q-ODC connector only IP67 when mated with dust cover or Q-ODC cable connector
Accessories	Outdoor to indoor patch cables (Q-ODC to xx-APC)

 $Specifications \ are \ subject \ to \ change \ without \ notice. \ Products \ from \ Swedish \ Microwave \ AB \ are \ made \ for \ commercial \ use.$ 

## Fiber optic LNB-Link



### **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.
- Free Link budget calculation support available on request.

### **Fully Outdoor Proof IP67**

- Transmitter unit packaged in a compact outdoor rugged aluminium enclosure.
- -40° to +80°C fully operating temp 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.

### Versatility

- Easy DIN-rail mount option for stacking.
- SMW LNB-Link transmitter is compatible with SMW Versa-Link Receiver and many other manufacturer's corresponding fiberoptic receiving devices.

# Applications Single fiber downlink connection from one LNB. Carries any 950 - 2150 MHz LNB RF signal Optional 10 MHz ref oscillator Existing or new DC cable Cr

SMW fiber patch cable

\*) SMW Fiber patch cable Q-ODC to xx-APC

Single mode G652 Fiber cable (up to 20km)

**1310 nm** 

 $Specifications \ are \ subject \ to \ change \ without \ notice. \ Products \ from \ Swedish \ Microwave \ AB \ are \ made \ for \ commercial \ use.$ 

RF in, DC out

or out

2

Transmitter

Rev.06-21-5D



New PSU

Versa-Link Fiber

Receiver or other brand

RF out

SMW fiber patch cable