

# Swedish Microwave RF over Fiber System Overview

SMW RF over Fiber Optic System gives you very little signal loss even for longer distances. Wide operating temperature range and outdoor proof. All parts designed and manufactured in Sweden to withstand extrem outdoor environmental conditions. We individually finetune all our products for the very best performance. RF over Fiber Optic solutions with highest RF and optimal performance.



Satellite Antenna

## System Components

- Power Supply
- 10 MHz Reference Oscillator
- 10 MHz Recovery Oscillator
- Adjustable Gain Amplifier
- Dual DC Inserter
- Cleaning Tool
- Fiber Optic cable

... more details on next page

## LNB Fiber Optic

- Ku-Band Dual (WDL)
- Ku-Band Quattro
- Ka-Band
- Ka-Band 2-Band
- X-Band

## Fiber Optic Receiver (RX)

Fiber optic to Coaxial Converter

- Versa-Link Receiver
- Quattro for WDL Fiber LNB
- Quad-Link Fiber system

## LNB Coaxial

Low Noise Block Down  
Frequency Converter

## Fiber Optic Transmitter (TX)

Coaxial to Fiber Optic Converter

- Versa-Link Transmitter
- Fiber Optic LNB Link
- Quad-Link Fiber system



Receiver / modem

# Swedish Microwave RF over Fiber system components



## Power Supply

The TDK-Lambda PSU is a AC/DC PSU series recommended for SMW RF over Fiber products. Tested with Fiber LNBs together with the Dual DC Inserter and also with Quattro Rx Receiver, Versa-Link, LNB-Link and Quad-Link RF-over-Fiber systems. For an Outdoor PSU, please contact us.



## 10 MHz Reference Oscillator

The SMW Outdoor proof 10 MHz Reference Oscillator provides up to  $\pm 30$  ppb LO stability and low phase noise. The output connectors can be ordered as SMA, N or F.



## 10 MHz Recovery Oscillator

The SMW Outdoor proof 10 MHz Recovery oscillator cleans up 10 MHz Reference Phase Noise and provides  $\pm 30$  ppb LO stability. The connectors can be ordered as SMA, N or F.



## Adjustable Gain Amplifier

Our adjustable Gain, Low power, Line Amplifier have very high IP3 and P1dB that allows installing directly after or close to the LNB. Available with F-, N- or SMA-connectors. DC, 22 kHz and 10 MHz bypass, is standard. Options include Separate DC power input via connector (F, N or SMA) or via cable (pigtail), DC-block.



## Dual DC Inserter

Our Dual DC Inserter couples supplied DC power to coax outputs for a convenient way to power two fiber optic LNBs. It is delivered as standard with 15 meter DC cable which is the max recommended length to avoid problems caused by voltage drop. The output connectors for DC feed to the LNBs can be ordered as SMA, N or F corresponding to your choice of DC input connectors on the Fiber optic LNBs.



## Cleaning Tool

Cleaning of Fiber optic ends is essential to maintain trouble-free operation and full specification of RF over Fiber systems. The Fiber Connector Cleaning Tool or "Click pen" is used to clean Fiber optic ends in Q-ODCS connectors due to their depth. It is highly recommended.



## Fiber Optic Cable

- Q-ODC to SC-APC (patch) 3, 15, 25, 50, 100 meter
- Q-ODC to LC-APC (patch) 3, 15, 25, 50, 100 meter
- Q-ODC to FC-APC (patch) 3, 15, 25, 50, 100 meter
- Q-ODC to Q-ODC (TX to RX) 50, 100, 150, 200, 300, 500, 1000 meter
- Q-ODC to E2000-APC (patch) 3, 25 meter  
(custom lengths on request)