

## Down-Converter

The DC-SW, switchable down-converter is suitable for COFDM digital links. It downconverts RF band signals to UHF band.

This down-converter has been designed to work in environments with high radio frequency levels. A band filter prevents the equipment from receiving and being saturated by strong nearby signals from other services. This input filter covers the input frequency range.

PHEMT technology and hybrid 3dB couplers are used to ensure excellent linearity. The third order intermodulation products (IP3) are very high, which means that there is no problem with working with strong COFDM signals modulated in 64QAM. Moreover, the down-converter has an excellent noise figure.

The local oscillator can be selected through a switch. The phase noise of the L.O. is extremely low and it has a very high frequency stability. Excellent results in MER are obtained in the receiver. This is very important when working without line of sight or 64QAM modulation.

This equipment is powered by the receiver. It can also be powered using a bias-tee.

It is water proof and it can work permanently under extreme weather conditions.



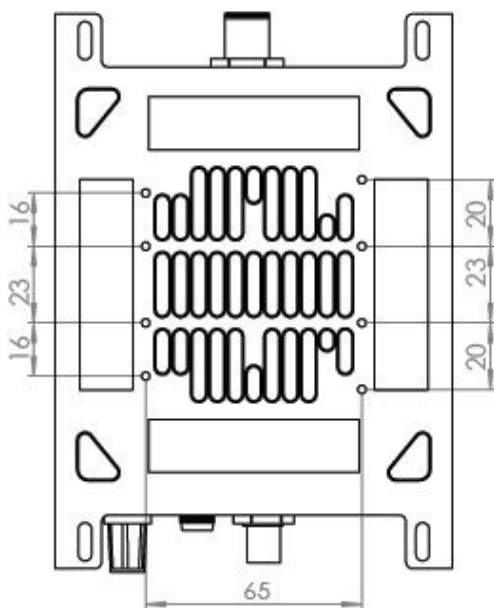
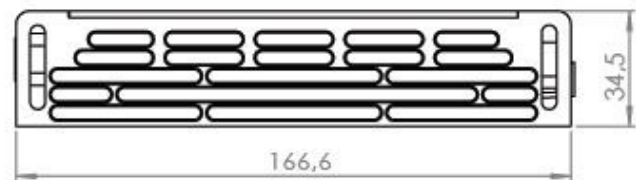
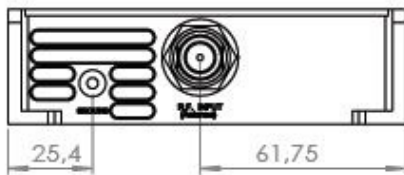
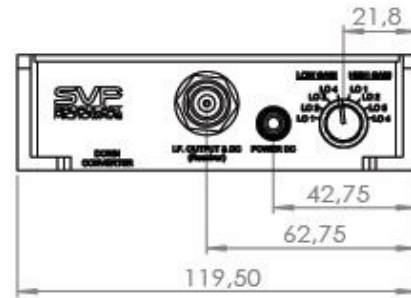
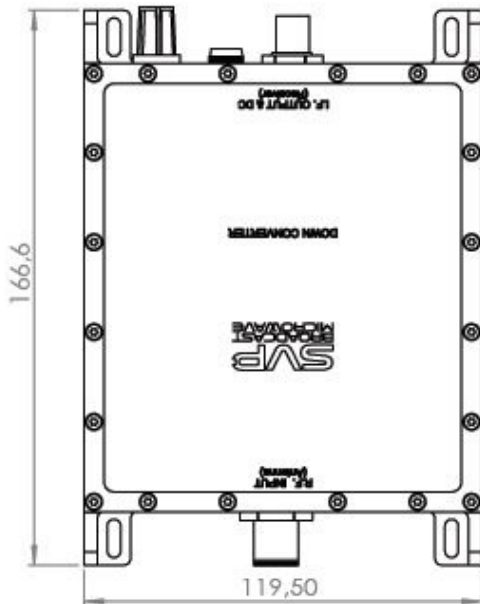
### FEATURES

- Configurable LO frequency and gain
- Low noise figure
- High linearity
- Low phase noise oscillator
- Remote power supply
- Tri colour LED status indication

## Characteristics

	DC-SW_1200-1500	DC-SW_2000-2700	DC-SW_3200-3900	DC-SW_4400-5000	DC-SW_5500-6000
Frequency band (RF)	1,200 to 1,500 MHz	2,000 to 2,700 MHz	3,200 to 3,900 MHz	4,200 to 5,000 MHz	5,500 to 6,000 MHz
Maximum input power	1 mW (0dBm)	1 mW (0dBm)	1 mW (0dBm)	1 mW (0dBm)	1 mW (0dBm)
Noise Figure @ 18 °C	typ. 0.5 dB, max. 1.0 dB	typ. 1.0 dB, max. 1.3 dB	typ. 1.7 dB	typ. 1.7 dB	1.5 dB, max. 2.0 dB
Gain @ 25 °C	typ. 35 dB / 15 dB	typ. 35 dB / 15 dB	typ. 35 dB / 15 dB	typ. 35 dB / 15 dB	typ. 35 dB / 15 dB
LO frequency	1700 MHz, 1000 MHz, 1600 MHz, 1800 MHz	1800 MHz, 1840 MHz, 1900 MHz, 2860 MHz	3000 MHz, 4100 MHz	5200 MHz	5100 MHz, 5150 MHz, 5200 MHz, 6300 MHz
RF connector			N female		
IF connector		TNC female (50 ohm), N female (50 ohm) or BNC female (75 ohm)			
Power supply			9 to 24 VDC		
Temperature range			-40 to +55 °C		
Size		119.5 x 166.6 x 34.5 mm (WxHxD) (w/o brackets)			
Weight		0.855 kg			

Mechanical Dimensions



How to Order

**DC-SW\_2000-2700T**

<b>1200-1500</b>	= 1300 – 1500 MHz
<b>2000-2700</b>	= 2000 – 2700 MHz
<b>3200-3900</b>	= 3200 - 3900 MHz
<b>4400-5000</b>	= 4400 - 5000 MHz
<b>5500-6000</b>	= 5500 - 6000 MHz

Frequency range

<b>T</b>	= TNC 50 Ohm
<b>N</b>	= N 50 Ohm
<b>B</b>	= BNC 75 Ohm

IF Output Connector



Design and specifications are subject to changes without prior notice: 07/20