

R&S® CS-MC20

MICROWAVE CONVERTER 20 GHz

Outdoor microwave downconverter
in a compact format



Product Brochure
Version 01.00

ROHDE & SCHWARZ

Make ideas real



AT A GLANCE

The R&S®CS-MC20 microwave downconverter extends the frequency range of the R&S®EM200 and R&S®UMS400 receivers up to 20 GHz and is fully controlled by the receiver. In combination with the R&S®HF9070M omnidirectional monitoring antenna, a wide range of applications can be addressed.

A built-in low-noise amplifier (LNA) can be activated to increase system sensitivity. In passive mode, the amplifier is bypassed and the antenna can also be used in the vicinity of strong transmitters.

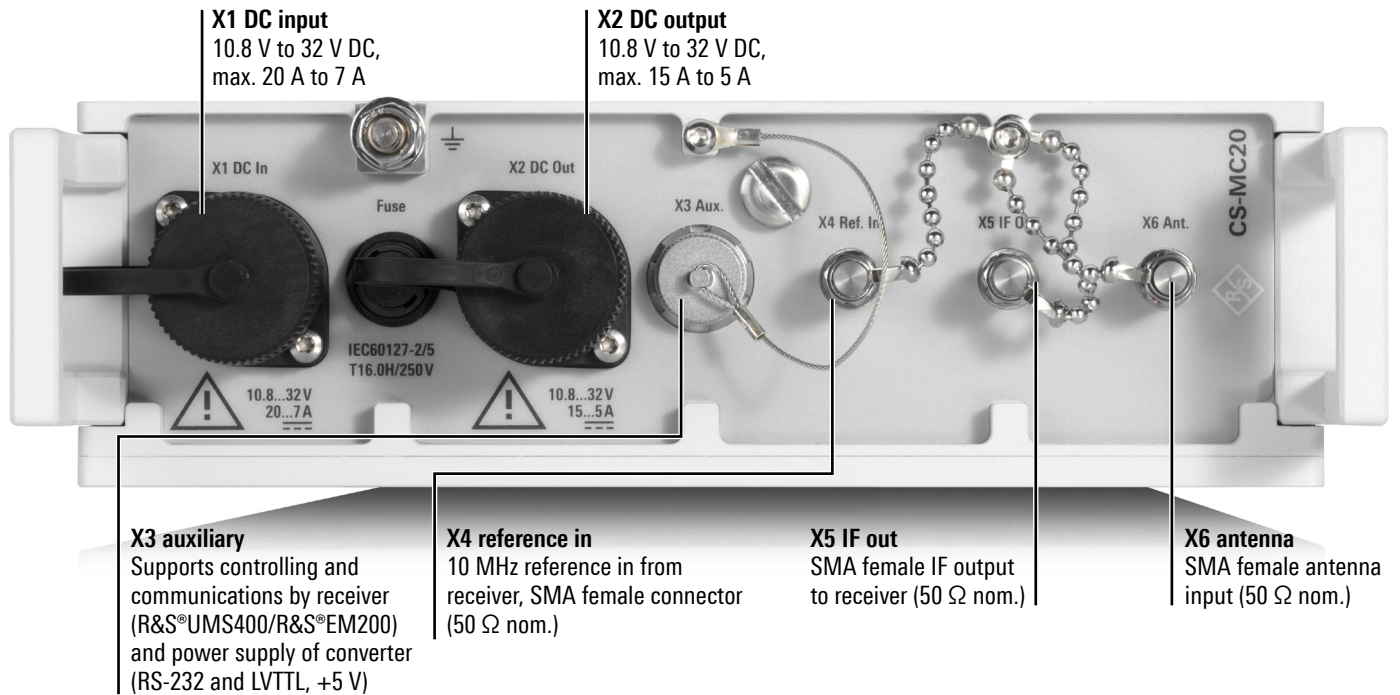
When the input frequency is below 8 GHz, the downconverter is bypassed. For frequencies from 8 GHz to 13.5 GHz, band 1 is used to convert the block of frequencies down to between 0.9 GHz and 6.4 GHz. For frequencies from 13.5 GHz to 20 GHz, band 2 is used. It converts the block of frequencies down to between 0.8 GHz and 7.3 GHz.

Thanks to the downconverter's compact outdoor housing, it can be installed together with the R&S®UMS400 universal monitoring system in remote controlled fixed and transportable monitoring stations. For the convenience of the user, the R&S®CS-MC20 allows an external DC power supply to be daisy chained to the R&S®UMS400. With this configuration, a single DC power supply can be used to supply power to both devices at the same time. If used with the R&S®EM200 digital compact receiver, the R&S®CS-MC20 will be powered via the AUX connection from the receiver.

KEY FACTS

- ▶ Conversion frequency range from 8 GHz to 20 GHz
- ▶ Real-time bandwidth support of up to 40 MHz
- ▶ Compliance with IP65 and IP67 for outdoor installation
- ▶ Compact design of only half a 19" rack (2 HU)
- ▶ Operating temperature from -30 °C to +55 °C
- ▶ Plug & play capability and fully controlled by the R&S®EM200 and R&S®UMS400

FRONT PANEL



SPECIFICATIONS IN BRIEF

Specifications in brief		
Frequency range	RF input	20 MHz to 20 GHz
Power consumption		15 W (meas.)
Power supply	DC input	10.8 V to 32 V DC, max. 20 A to 7 A
	DC output	10.8 V to 32 V DC, max. 15 A to 5 A
Operating temperature range	with heater turned on	-30 °C to +55 °C
Storage temperature range		-40 °C to +70 °C
Protection class		IP65 and IP67, in line with IEC 60529
Dimensions	W × H × D	approx. 227 mm × 65 mm × 367 mm (8.9 in × 2.6 in × 14.4 in)
Weight		approx. 4 kg (8.8 lb)

ORDERING INFORMATION

Designation	Type	Order No.
Base unit (including accessories such as power cable, manual)		
Microwave converter 20 GHz (base unit including cable set with RF, ref. in and AUX connectors)	R&S®CS-MC20	4502.4503.02
Accessories		
Outdoor mounting kit, for R&S®UMS400 with R&S®CS-MC20	R&S®CS-OMK	4502.0720.02
Mounting kit, for R&S®UMS400 with R&S®CS-MC20	R&S®CS-MK	4502.1110.00
Rackmount adapter, for R&S®UMS400 with R&S®CS-MC20	R&S®CS-RK3	4502.1256.00
Rackmount adapter, for R&S®EM200 with R&S®CS-MC20	R&S®CS-RK4	4502.1327.00

Service options		
Extended warranty, one year	R&S®WE1	Contact your local Rohde & Schwarz sales office.
Extended warranty, two years	R&S®WE2	
Extended warranty, three years	R&S®WE3	
Extended warranty, four years	R&S®WE4	

Service at Rohde & Schwarz You're in great hands

- ▶ Worldwide
- ▶ Local and personalized
- ▶ Customized and flexible
- ▶ Uncompromising quality
- ▶ Long-term dependability

Rohde & Schwarz

The Rohde&Schwarz technology group is among the trail-blazers when it comes to paving the way for a safer and connected world with its leading solutions in test & measurement, technology systems and networks&cybersecurity. Founded 90 years ago, the group is a reliable partner for industry and government customers around the globe. The independent company is headquartered in Munich, Germany and has an extensive sales and service network with locations in more than 70 countries.

www.rohde-schwarz.com

Sustainable product design

- ▶ Environmental compatibility and eco-footprint
- ▶ Energy efficiency and low emissions
- ▶ Longevity and optimized total cost of ownership

Certified Quality Management

ISO 9001

Certified Environmental Management

ISO 14001

Rohde & Schwarz training

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