

# Антенный тюнер FK002H0



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Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13

Казахстан (772)734-952-31

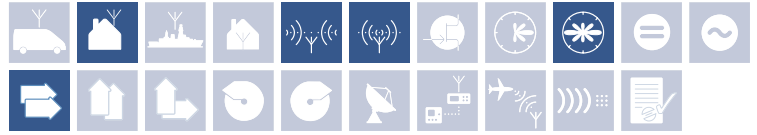
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Тверь (4822)63-31-35  
Томск (3822)98-41-53  
Тула (4872)74-02-29  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
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SHF Antennas R&S®FK002H0 Antenna tuning unit (1 kW)

# R&S®FK002H0 ANTENNA TUNING UNIT (1 KW)

1.5 MHz to 30 MHz

For stationary, land-mobile and shipboard applications



The R&S®FK002H0 is a standalone antenna tuning unit (ATU). It can match the impedance of a radiator to 50  $\Omega$  for every frequency from 1.5 MHz and 30 MHz.

The R&S®FK002H0 is powered and controlled by the R&S®GX002 junction unit.

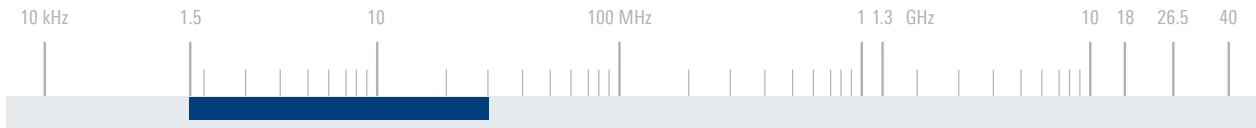
The R&S®FK002H0 can be operated under harsh environmental conditions and continuous 24-hour operation. The rugged, waterproof and dustproof construction of the R&S®FK002H0 allows its use in stationary, land-mobile and shipboard applications.

Together with the R&S®GX002, the R&S®FK002H0 is seamlessly integrable into the R&S®Series4100 radio systems. Furthermore, the R&S®FK002H0 can be controlled by a third-party system controller via LAN interface or it works fully automatically with a third-party transceiver when in autonomous mode.

For cooling, the R&S®FK002H0 is provided with a sophisticated internal air circulation system.

## Key facts

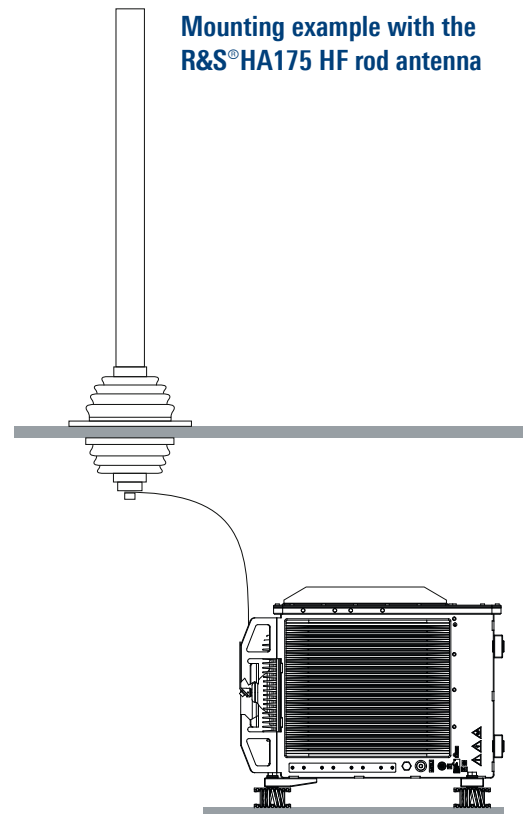
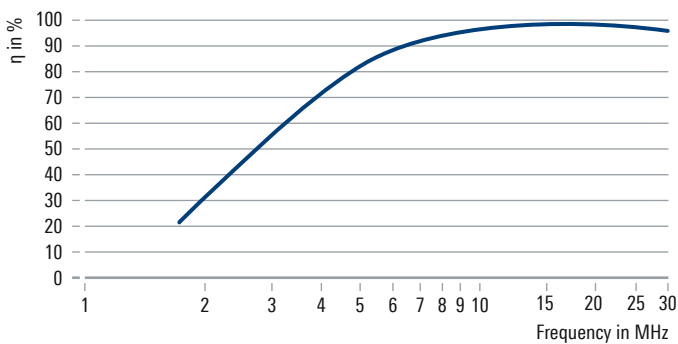
- ▶ High RF power at small antennas (1 kW RF power at rod antennas starting at 7 m)
- ▶ High efficiency (no resistive loading)
- ▶ HF-cable-only interface
- ▶ Cosite robust, fast tuning with low RF power (active tune) or zero RF power (silent tune)
- ▶ Transceiver-independent control interface and power supply (via R&S®GX002)
- ▶ Fully automatic operation possible (autonomous mode)



## Specifications

Frequency range		1.5 MHz to 30 MHz
Max. permissible RF input power		1 kW
Input impedance		nom. 50 $\Omega$
Permissible antennas		monopole antennas with radiator length from 7 m to 12 m (e.g. R&S®HA175) wire antennas with radiator length from 8 m to 30 m (e.g. R&S®AK503)
VSWR after tuning		$\leq 1.8$ ; typ. $\leq 1.3$
Tuning time	silent tune/bypass activation	< 35 ms
	active tune	< 25 s; typ. < 8 s
Tuning power	integrated antenna analyzer	$\leq 1$ W
Efficiency	depends on frequency and connected antenna	20% to 90% (typ.)
Power supply	via R&S®GX002	max. 150 W
Protection class		IPx6, waterproof, in line with IEC 60529
Dimensions	L x W x H	approx. 0.45 m x 0.45 m x 0.58 m (17.7 in x 17.7 in x 22.8 in)
Weight		approx. 54.5 kg (120.2 lb)

Typical efficiency for rod antenna at height of 7 m to 10 m



# Ordering information

Ordering information	Type	Order No.
Antenna tuning unit (1 kW)	R&S®FK002H0	4105.8006.02
<b>Recommended extras</b>		
Junction unit	R&S®GX002	4106.0009.02
HF rod antenna	R&S®HA175	0101.1101.02



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