R&S[®]KG5x00 SYSTEM RACK







Product Flyer Version 01.00

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Make ideas real



AT A GLANCE

The R&S®KG5x00 system rack is a universal 19" standard rack. The basic configuration is a 42 or 46 height units (HU) empty rack. It can house a fully equipped radio system consisting of the R&S®Series4200, R&S®Series4400, R&S®Series4100 and, most recently, R&S®Series5200 radios.



The R&S®KG5x00 rack was developed with the R&S®Series5200 radios in mind.

Setting up compact, durable and reliable infrastructure is a key task for air traffic control (ATC) authorities. An increasingly broad range of auxiliary equipment and stricter safety requirements impose an ever more demanding challenge on planning and logistics. This trend calls for a flexible and sophisticated equipment-mounting solution that can be put into operation quickly and easily.

The R&S[®]KG5x00 system rack meets these requirements. It has been specially optimized to suit the new, more compact R&S[®]Series5200 and unlock its full potential. The rack accommodates a large number of radio channels in a small space. Thanks to the standardized setup in a 19" form factor, various commercial off-the-shelf (COTS) equipment such as Ethernet switches can be integrated alongside the radios.

Versatile configurations

The R&S[®]KG5x00 is specially developed to suit the needs of an ATC communications system and is a perfect match for CERTIUM[®] RADIOS. It provides a versatile basis for a range of radio configurations, including MAIN/STANDBY setups with additional filters or other auxiliary equipment. A suggested configuration with a single 46 HU R&S[®]KG5x00 rack, shown on the right, uses 24 R&S[®]Series5200 transceivers (2 HU, half width) paired with 6 dual-channel filters (3 HU, full width) and 2 Ethernet switches (1 HU, full width) to provide 12 redundant filtered radio channels.

Example configuration of a 46 HU rack with 24 R&S[®]Series5200 radios

Ethernet		
1 HU free space		— 2 redundant switches
Ethernet switch B —		(switch height: 1 HU)
1 HU free space		
Main radio, channel no. 1	Standby radio, channel no. 1	
Main radio, channel no. 2	Standby radio, channel no. 2	— 12 main radios
Main radio, channel no. 3	Standby radio, channel no. 3	(radio height: 2 HU)
Main radio, channel no. 4	Standby radio, channel no. 4	
Main radio, channel no. 5	Standby radio, channel no. 5	
Main radio, channel no. 6	Standby radio, channel no. 6 -	
Main radio, channel no. 7	Standby radio, channel no. 7	(radio height: 2 HU)
Main radio, channel no. 8	Standby radio, channel no. 8	
Main radio, channel no. 9	Standby radio, channel no. 9	
Main radio, channel no. 10	Standby radio, channel no. 10	6 two-channel filters (filter height: 3 HU)
Main radio, channel no. 11	Standby radio, channel no. 11	
Main radio, channel no. 12	Standby radio, channel no. 12	
Filter, for channels no. 1 and 2		
Filter, for channels no. 3 and 4		
Filter, for channels no. 5 and 6		12 redundant filtered
Filter, for channels no. 7 and 8		radio channels in a single rack
Filter, for channels no. 9 and 10		
Filter, for channels no. 11 and 12		

Options

A wide variety of options is available to expand the R&S®KG5x00 rack's range of applications beyond the basic configuration. These include installation kits, Ethernet switches, RF relays, filters, couplers and cabling.

Quality that lasts

The R&S[®]KG5x00 rack is made of stainless steel and aluminum, which ensures a long service life and high durability. It protects the equipment against mechanical stress and unauthorized access to the integrated components.

Easy to install

Preinstalled rackmounts make it easy for the user to install radios and COTS products in the rack. The prewired AC power supply is ready to be connected, minimizing setup time and effort.

The transceiver of the R&S®Series5200, the new, stateof-the-art ATC radio from Rohde & Schwarz, is only 2 HU high, providing 50% more efficient space utilization compared to the previous generation R&S®Series4200. The R&S®KG5x00 rack adopts this slimmer device footprint to make room for additional radio channels or auxiliary COTS equipment.

No additional cooling required

The perforated rear panel and door ensure that a fully equipped R&S[®]KG5x00 is sufficiently cooled at room temperature. In addition, several racks can safely be set up next to each other without this affecting performance.



R&S®Series5200 radios in an R&S®KG5x00 rack during operation.

Specifications		
Power supply	AC	up to 4 blocks, 230 V AC, 50 Hz to 60 Hz, 16 A each
	DC, with R&S [®] KG5x-Z5/R&S [®] KG5x-Z5K option	19 V to 25 V DC
Temperature, rack only	operating temperature range	-20°C to +55°C
	storage temperature range	-40°C to +70°C
Material	frame	zinc plated steel
	panels	prepainted aluminum
Color	frame	RAL 7047, telegray
	panels	RAL 7047, telegray
Dimensions (W \times H \times D)	42 HU rack	2020 mm (2060 mm with adjustable feet) \times 800 mm \times 600 mm (79.5 in (81.1 in with adjustable feet) \times 31.5 in \times 23.6 in)
	46 HU rack	2200 mm (2240 mm with adjustable feet) \times 800 mm \times 600 mm (86.6 in (88.2 in with adjustable feet) \times 31.5 in \times 23.6 in)
Weight	empty rack with two side panels and a single rear panel	
	42 HU rack	62 kg (137 lb)
	46 HU rack	67 kg (148 lb)

ORDERING INFORMATION

Designation	Туре	Order No.
System rack, model .02, 19", 42 HU	R&S [®] KG5x00-42	6206.0002K02
System rack, model .06, 19", 46 HU	R&S [®] KG5x00-46	6206.0002K06

SPECIFICATIONS

Service that adds value

- ► Worldwide
- Local and personalized
- Customized and flexible
- Long-term dependability

Rohde & Schwarz

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