

# R&S®GB127x Antenna Control Units

Rotator control plus RF and IF signal distribution



The family of R&S®GB127x antenna control units is a cost-effective and reliable solution for controlling antenna rotators and distributing RF and IF signals. The family includes the R&S®GB127S/M/MU and R&S®RD127 models.

The R&S®GB127S antenna control unit is designed as a universal antenna control unit for stationary systems. It is normally used in combination with the R&S®RD127 rotator control unit, which contains the RF switching section and the control unit for the antenna rotators.

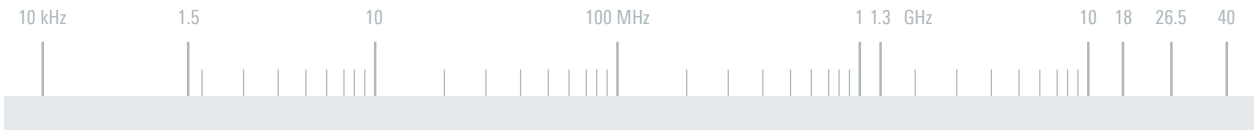
The R&S®GB127M antenna control unit has been designed for mobile systems and contains the control unit for the antenna rotators.

The R&S®GB127MU mast control unit is the interface between a telescopic mast and the R&S®GB127M antenna control unit.

## Key facts

- Suitable for stationary and mobile applications
- Compact design
- Split concept for stationary applications with R&S®RD127 remote rotator control unit mounted close to the antennas, minimizing cabling
- Manual operation and remote control
- Additional outputs for controlling additional switch units over same control interface
- Antenna controllable in all three degrees of freedom (azimuth, polarization and height)





| Specifications              |  |
|-----------------------------|--|
| Interfaces                  |  |
| R&S®GB127S                  | COM1 to 4, LPT, EXP1 to 2, I <sup>2</sup> C REM CTRL, POWER, loudspeaker, display, keypad, chipcard reader                   |
| R&S®GB127M                  | COM1 to 4, LPT, EXP1 to 2, I <sup>2</sup> C REM CTRL, POWER, ELV/POL, AZIMUTH, loudspeaker, display, keypad, chipcard reader |
| R&S®GB127MU                 | DC IN, ENCODER, MAST CONTROL, MAST ALARM, MAN/AUTO, MAN MAST CONTROL, COM1, REM CTRL   |
| R&S®RD127                   | RF IN, RF OUT, ELV/POL, AZIMUTH, ROTATOR CONTROL   |
| Operating temperature range |  |
| R&S®GB127S/M                | 0°C to +50°C   |
| R&S®GB127MU                 | -20°C to +55°C   |
| R&S®RD127                   | -35°C to +55°C   |
| Storage temperature range   |  |
| R&S®GB127S/M/MU/RD127       | -40°C to +70°C   |

|                                |   |
|--------------------------------|---|
| Humidity                       |   |
| R&S®GB127S/M/MU                | 95% relative humidity at +40°C                                |
| R&S®RD127                      | 95% relative humidity at +55°C                                |
| Power supply                   |   |
| R&S®GB127S                     | 100 V to 240 V AC/50 Hz to 60 Hz 180 VA                       |
| R&S®GB127M/MU                  | 10 V to 33 V DC   |
| R&S®RD127                      | +28 V DC (via control input)                                  |
| Overall dimensions (W x H x D) |   |
| R&S®GB127S/M                   | approx. 484 mm x 89 mm x 495 mm (19.1 in x 3.5 in x 19.5 in)  |
| R&S®GB127MU                    | approx. 220 mm x 83 mm x 150 mm (8.7 in x 3.3 in x 5.9 in)    |
| R&S®RD127                      | approx. 404 mm x 356 mm x 183 mm (15.9 in x 14.0 in x 7.2 in) |
| RF data R&S®RD127              |   |
| Frequency range                | DC to 3 GHz   |
| Impedance                      | 50 Ω  |
| Switching time                 | ≤15 ms  |

| Ordering information   | Type        | Order No.    |
|--|-------------|--------------|
| Antenna Control Unit (for indoor use, control via RS-232 interface and manual operation)   |             |              |
| With external rotator control  | R&S®GB127S  | 3022.2011.02 |
| With integrated rotator control  | R&S®GB127M  | 3022.2511.02 |
| Mast Control Unit (for outdoor use, control via R&S®GB127M)  | R&S®GB127MU | 3027.4512.02 |
| <b>Options</b>   |             |              |
| Rotator Control Unit (for outdoor use, control via R&S®GB127S)   |             |              |
| With 1-out-of-4 switch   | R&S®RD127   | 3021.9012.05 |
| With 1-out-of-8 switch   |             | 3021.9012.08 |
| DC Feed, 100 kHz to 3 GHz  | R&S®ZS129F1 | 3024.6614.02 |
| Typically used equipment: Yaesu G2800 and Winter AR/AE1049 azimuth rotators, Yaesu G550 polarization/elevation rotator. Other models on request. |             |              |



R&S®RD127 rotator control unit.

