



RELAY7

RTK rover radio module for SMART7 antennas



RELAY7 shown mounted at rear of a SMART7

Easy integration

RELAY7 from Hexagon | NovAtel is a rover radio module that attaches to the SMART7 to create a single unit for easy system integration and installation.

Multiple UHF radio options

With the option of a 400 MHz or 900 MHz radio, receive RTK corrections from a compatible base station using one of the many supported correction formats.

Magnetic or screw mounting options

The SMART7/RELAY7 combination can be mounted to a vehicle using integrated magnets or screws.

Benefits

• Radio connectivity for SMART7 to receive RTK corrections

Features

- 400 MHz option compatible with various base stations
- 900 MHz option compatible with Freewave base stations

Performance

Radio options

400 MHz 900 MHz

Radio specifications

400 MHz model

Frequency band (receive only) 403 to 473 MHz Rx sensitivity -103 dBm @ 25 kHz 103 dBm @ 12.5 kHz

900 MHz model

Frequency band (receive only) 902 to 928 MHz Rx sensitivity -108 dBm

Radio compatibility

400 MHz model

SATEL 3AS PacCrest - 4FSK

PacCrest - GMSK

PacCrest - FST TrimTalk 450s (P)

TrimTalk 450s (T)

900 MHz model

Freewave MM2-T (900 MHz) point to multipoint

Physical and electrical

Dimensions 186.5 L x 199.5 W x 76.4 H mm

Weight <850 g

Interface connector 14-pin Tyco Ampseal

External radio antenna connector

TNC female jack, 50Ω nominal

Optional ethernet cable M12D (M) to (F)

Mounting

4 x M4 screw inserts Integrated magnetic mount

Power

Input voltage range +7 to +30 VDC
Power consumption 2 W typical

Status LED

Interface ports

Pass through from SMART7

RS-232 dedicated ports 2
CAN Bus 1
Ground speed output 1

Environmental

Temperature

Operating $-40^{\circ}\text{C to } +70^{\circ}\text{C}$ Storage $-45^{\circ}\text{C to } +80^{\circ}\text{C}$

Humidity MIL-STD-810G(CH1), 507.6

Sand and dust MIL-STD-810G(CH1), 510.6

Immersion MIL-STD-810G(CH1), 512.6

Vibration MIL-STD-810G(CH1), 514.7

Shock MIL-STD-810G(CH1), 516.7

Solar radiation MIL-STD-810G(CH1), 505.6

Salt fog MIL-STD-810G(CH1), 509.6

Ingress protection rating IP67, IP69

Compliance

FCC, ISED, CE Mark, E-Mark

Available hardware models

- RELAY7-400
- RELAY7-900

Optional accessories

- 400 MHz or 900 MHz antenna
- · Interface cable
- Ethernet passthrough cable

Contact Hexagon | NovAtel

sales.nov.ap@hexagon.com1-800-NOVATEL (U.S. and Canada) or 403-295-4900 | China: 0086-21-68882300 | Europe: 44-1993-848-736 | SE Asia and Australia: 61-400-883-601. For the most recent details of this product: novatel.com

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