



RELAY7

RTK rover radio module for SMART7 antennas



RELAY7 shown mounted at rear of 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 mm L x 199.5 mm W x 76.4 mm H

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

 $\begin{array}{ll} \text{Input voltage range} & +7 \text{ to } +30 \text{ VDC} \\ \text{Power Consumption} & 2 \text{ W typical} \end{array}$

Status LED

Interface Ports

Pass through from SMART7

RS-232 dedicated ports

CAN Bus

Ground speed output

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

Available Hardware Models

RELAY7-400 RELAY7-900

Optional Accessories

400 MHz or 900 MHz antenna Interface cable Ethernet passthrough cable

Compliance

FCC, ISED, CE Mark, E-Mark

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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