
RELAY7™ RTK Radio



RTK ROVER RADIO MODULE FOR SMART7 ANTENNAS



RELAY7 shown mounted at rear of SMART7

EASY INTEGRATION

NovAtel's RELAY7 rover radio module 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 support RTK corrections

FEATURES

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

For more information about our SMART antenna products, visit www.novatel.com/smart-antennas

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, 50 Ω 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 1

INTERFACE PORTS

Pass through from SMART7

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

ENVIRONMENTAL

Temperature

» Operating -40°C to +70°C
» Storage -45°C to +80°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

For the most recent details of this product:
www.novatel.com/products/smart-antennas

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Europe 44-1993-848-736

SE Asia and Australia 61-400-883-601

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D22997 September 2018

