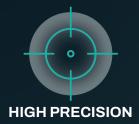


REACT







& REJECTION





REACT (Receiver Antenna Compact Technology) is a compact, rugged enclosure containing a high quality GNSS receiver and antenna to provide a cost effective and flexible solution to your requirements.

SCALABLE PRECISION PERFORMANCE

REACT can operate as a single position to 1.5m or upgraded to use correction sources and achieve positions as precise as 1cm (RTK). The REACT is well suited to operate as an RTK base station or rover and can be configured to output GNSS heading. REACT can be connected to an IMU to create an Inertial Navigation System.

REACT VARIANTS

The REACT is a modular product which can be constructed to meet a variety of applications. Available in three signal plans L1, L1/L2 or L1/L5.

BUILT FOR RUGGED ENVIRONMENTS

The compact, rugged enclosure is MIL-STD qualified with respect to EMC, shock, vibration and environmental standards.

INTERFERENCE PROTECTION

High performance NovAtel OEM7 receiver provides options for signal protection against interference and jamming.



PERFORMANCE

Horizontal Position Accuracy (RMS)

Single Point L1 Single Point L1/L2 SBAS² 0.4m 1cm + 1ppm

0.1° (2m), 0.05° (4m)⁴ 0.2° (2m), 0.01° (4m)⁴ 20 ns RMS 0.03 m/s RMS - 0.05 m/s RMS Azimuth Accuracy³ (ALIGN) Roll, Pitch Acuracy³ (ALIGN) Time Accuracy⁴ Velocity Accuracy

Up to 20G (sustained tracking)

Channel Configuration

p to 555 Channels eACT-RNS GPS L1, GLONASS L1 GPS L1/L2, GLONASS G1/G2/G3, Galileo E1/E5b, BeiDou B1/B GPS L1/L5, GLONASS G1, ReACT-QNS L1/L2

Measurement Precision (RMS)

L1 C/A Code 4cm L1 Carrier Phase 0.50mm (differential channel) L2 P(Y) Code⁷ 8cm L2 Carrier Phase 1.00mm (differential channel) L5 Code 3cm L5 Carrier Phase 0.50mm (differential channel)

Galileo E1/E5a, BeiDou B1/B2a, NavIC L5

Data Rates (Measurements and Positions)

Time to First Fix

Hot Start

Signal Reacquisition

L2 & L5 1.0 sec (typical) 5-8 sec

1-Typical values. Performance specifications subject to GPS system 1-Typical values. Performance specifications subject to GPS system characteristics, US DOD operational degradation, ionospheric and tropospheric conditions, satellite geometry, baseline length, multipath effects and the presence of intentional or unintentional interference sources. Independent tests performed at FSL office using L1L2 GPS+GLO showed improved performance figures than the stated typical values.

2-SBAS includes WAAS, EGNOS and MSAS type systems, GPS only.

3-Accuracy obtained using a baseline length of 2 to 4 metres.

4-Time accuracy does not include biases due to RF or antenna delay.

5-Export licensing restrictions apply.

6-Dependant on receiver model installed

7-L2 P for GLONASS

8-Typical value. No almanac or ephemeris and no approximate position or

8-Typical value. No almanac or ephemeris and no approximate position or time. 9-Typical value. Almanac and recent ephemeris saved and approximate

position and time entered.

10-After a complete loss of satellite signals this is the typical period the receiver takes to compute an acceptable position in a high dynamics scenario.

11-GPS L1/L2, GLONASS L1/L2

12 -Depends on hardware model

PHYSICAL AND ELECTRICAL

NS/D5: 116mm x 116mm x 84mm NSc/D5c: 116mm x 116mm x 79mm

~600g +9 to +36 VDC

Input voltage +9
Power consumption <3W¹² typical

Communication Ports

1x R3232 2x RS232 EDGE-WARE ports (D5 Model) 1x CAN 1Mbps (D5 model) 1x USB 2.0, 12 Mbps

Auxiliary strobe signals, including a configurable PPS output for time synchronization and mark.

FEATURES AND MOUNTING

3x M6 for plate mounting (standard) 3x 10-32 UNF for plate mounting (optional) 5/8" thread for centre mounting (NS/D5 only) Field-upgradeable software
PAC multipath mitigating technology
Differential GPS positioning
Differential correction support for RTCM, CMR, CMR+ and RTCA **EDGE-WARE Modules**





ENVIRONMENTAL

Operating Storage -32°C to +75°C -40°C to +85°C Regulatory EMC

Salt Spray Sand and Dust

European CE, 89/ EEC EIN 55022 Class D, EN50082-1 EN50082-1 MIL-STD-461F (Ground, Army), FCC Class A MIL-STD 810F, method 512.4, IEC 60529 IPX7 MIL-STD 810F, method 507.4, procedure 1 MIL-STD 810F, method 510.4 MIL-STD 810F, method 510.4 MIL-STD 810F, method 514.5, Category 20 MIL-STD 810F, method 514.4 tbl. 514.4-AXVII MIL-STD 810F, method 516.5, Procedure I, IV IEC 61000-4-2 level 2 (± 4 KV) Electrostatic Discharge (ESD) Ultraviolet Light Protection IEC 61000-4-2 level 2 (± 4 KV) MIL-STD-810F, method 505.4

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