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InGeoHardware (IGH)
NIT 91295178-9

CERTIFICACIÓN GNSS

Fecha: 18/04/2024
CERTIFICACIÓN N° 240420

Señor MAINER YESID ACOSTA DE LA HOZ
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Equipos actualizados (Firmware 31.8)

GNSS IGHM2 (EMLID REACH M2) CON NÚMERO SERIAL 824321F3943E41E52338
GNSS IGHM2 (EMLID REACH M2) CON NÚMERO SERIAL 82436F79F351A1A12338

Receiver info

Receiver and hotspot name

Receiver name BASE-IGHM2-MA
Hotspot name BASE-IGHM2-MA:41:E5
Address BASE-IGHM2-MA.local

Edit

Device secret

Copy secret

About

Serial number 824321F3943E41E5

Receiver info

Receiver and hotspot name

Receiver name ROVER-IGHM2-MA
Hotspot name ROVER-IGHM2-MA:A1:A1
Address ROVER-IGHM2-MA.local

Edit

Device secret

Copy secret

About

Serial number 82436F79F351A1A1

M2

BASE-IGHM2-MA

192.168.1.97

Satellites

Correction input

Base output

Base settings

Logging

Wi-Fi

Bluetooth

GNSS settings

Position streaming 1

Position streaming 2

General

Firmware updates

Current version

31.8

Check for updates

Reach is up to date

Beta updates notification

Enable Beta updates to try out the latest features of your Reach.

SINGLE

29

Status overview

Satellites in view

29

PDOP

3.9

Solution

SINGLE

Positioning mode

KINEMATIC

Camera time mark

-

Coordinates and precision

-73.12405961° E

σE 1.200 m

7.10391462° N

σN 1.300 m

960.567 m

σU 2.200 m

Corrections

Correction input is off

Satellites in view

0

Age of corrections

-

M2

ROVER-IGHM2-MA

192.168.1.98

Satellites

Correction input

Base output

Base settings

Logging

Wi-Fi

Bluetooth

GNSS settings

Position streaming 1

Position streaming 2

General

Firmware updates

Receiver info

Troubleshooting

Night mode

Firmware updates

Current version

31.8

Check for updates

Reach is up to date

Beta updates notification

Enable Beta updates to try out the latest features of your Reach.

FLOAT

30

Status overview

Satellites in view

30

PDOP

6.0

Solution

FLOAT

Positioning mode

KINEMATIC

Camera time mark

-

Coordinates and precision

-73.12389297° E

σE 0.190 m

7.10398361° N

σN 0.210 m

936.715 m

σU 0.420 m

Corrections

Receiving corrections

Satellites in view

17

Age of corrections

5.2 s

Baseline

1.376 m

Base position

-73.12388395° E

7.10398747° N

937.562 m

- El equipo GNSS IGHM2 (EMLID REACH M2) con número serial **#824321F3943E41E52338** que se identifica con el nombre de red **BASE-IGHM2-MA** se actualizo el firmware a la ultima versión estable **#31.8**, las constelaciones que rastrea el GNSS IGHM2 actualmente son:

GPS L1C/A, L2C
SBAS
GLONASS L1OF, L2OF
GALILEO E1B/C, E5b
BEIDOU B1I, B2I

Cumple con los siguientes valores de posicionamiento:

Estático	(4mm + 0.5 ppm Horizontal)	(8mm + 1.0 ppm Vertical)
RTK	(7mm + 1.0 ppm Horizontal)	(14mm + 1.0 ppm Vertical)
PPK	(5mm + 0.5 ppm Horizontal)	(10mm + 1.0 ppm Vertical)

El GNSS IGHM2 graba en formato internacional RINEX (3.03), la antena de rastreo del GNSS IGHM2 es de la marca BEITIAN referencia BT-800D que se encuentra en los registros de calibración de antenas de la agencia NOAA, archivos NGS14 Absolute y NGS20 Absolute, se identifica con el código de antena BEIBT800D, para ser usado en cualquier software de postproceso.

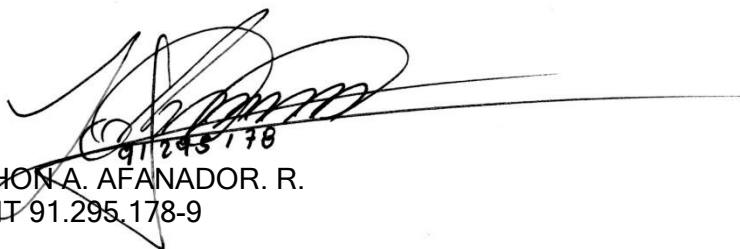
- El equipo GNSS IGHM2 (EMLID REACH M2) con número serial **#82436F79F351A1A12338** que se identifica con el nombre de red **ROVER-IGHM2-MA** se actualizo el firmware a la ultima versión estable **#31.8**, las constelaciones que rastrea el GNSS IGHM2 actualmente son:

GPS L1C/A, L2C
SBAS
GLONASS L1OF, L2OF
GALILEO E1B/C, E5b
BEIDOU B1I, B2I

Cumple con los siguientes valores de posicionamiento:

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CARACTERISTICAS Y POSICIONAMIENTO MODULO GNSS EMLID REACH M2

Specifications

Reach M2

Mechanical

Dimensions	56.4 x 45.3 x 14.6 mm
Weight	35 g
Operating t°	-20...+65 °C

Electrical

Input voltage on USB and JST GH	4.75 - 5.5 V
Antenna DC bias	3.3 V
Avg. consumption @5V	200 mA

Positioning

Static horizontal	4 mm + 0.5 ppm
Static vertical	8 mm + 1 ppm
Kinematic horizontal	7 mm + 1 ppm
Kinematic vertical	14 mm + 1 ppm

Connectivity

LoRa radio (sold separately)	
Frequency range	868/915 MHz
Wi-Fi	802.11b/g/n
Bluetooth	4.0/2.1 EDR
Ports	USB, UART, Event

Data

Corrections	NTRIP, VRS, RTCM3
Position output	NMEA, LLH/XYZ
Data logging	RINEX with events with update rate up to 20 Hz* <i>*coming with a software update. up to 10 Hz now</i>
Internal storage	16 GB

GNSS

Signal tracked	GPS/QZSS L1C/A, L2C GLONASS L1OF, L2OF BeiDou B1I, B2I Galileo E1-B/C, E5b
Number of channels	184
Update rates	10 Hz GNSS
IMU	9DOF

NOAA ANTENNA CALIBRATIONS BEITIAN BT-800D

Antenna Calibrations

National Geodetic Survey

NGS Home | About NGS | Data & Imagery | Tools | Surveys | Science & Education

Browse Antenna Information by Company Brand and Model + Access Calibrations for All Antennas + Help Links +

Beitian

Individual calibrations for Antenna Types (Antenna Code + Radome Code) with images and orientation details.
NOTE:
Expand an ARP or NRP abbreviation, by hovering the mouse cursor over the 3-letter code. On a mobile device, tap the code.

Antenna Code	Radome Code	Images	Calibrations	Description
BEIBT300	NONE	Drawing Label Side Top	ANTEX ANTINFO	Beitian BT-300, A
BEIBT300D	NONE	Drawing Label Side Top	ANTEX ANTINFO	Beitian BT-300D, A
BEIBT300S	NONE	Drawing Label Side Top	ANTEX ANTINFO	Beitian BT-300S, A
BEIBT800	NONE	Drawing Label Side Top	ANTEX ANTINFO	Beitian BT-800, A
BEIBT800D	NONE	Drawing Label Side Top	ANTEX ANTINFO	Beitian BT-800D, A
BEIBT800S	NONE	Drawing Label Side Top	ANTEX ANTINFO	Beitian BT-800S, A

Antenna Type:
BEIBT800D **NONE**

Brand code: BEI (Beitian)
Antenna model: BT-800D
Antenna code: BEIBT800D
Radome code: NONE

Antenna reference point(ARP):Bottom of antenna mount(BAM)
North reference point(NRP):Receiver connector(RXC)

CARACTERÍSTICAS ANTENA DE RASTREO BT-800D

Antenna Specifications	
Rango de frecuencia (MHz)	GPS L1/L2 GLONASS L1/L2 BDSB1I/B1C/B2I/B2a/B2b/B3I GALILEO E1/E5b
Ganancia (dBi)	5,5
Antena AR (dB)	≤ 3,0
Ángulo de cobertura horizontal	360 °
VSWR	≤ 2,0
Error del centro de fase (mm)	± 2
Polarización	Polarización circular derecha
Impedancia del puerto (Ω)	50

