GF-8048

www.furuno.com

GPS Rubidium Disciplined Oscillator

Ideal for high-precision and high-stability demands such as Broadcasting, Laboratories use, etc.

- Highly-stable frequency and high accurate UTC time can be easily obtained worldwide.
- The GF-8048 incorporates rubidium oscillator as a base oscillator. The excellent low phase noise is realized by the combination of OCXO and GPS.
- The GF-8048 can continuously output high accurate and stable 1PPS and 10MHz even if GPS receiver loses the GPS satellite signals in holdover mode.
- The GF-8048 realizes the coherency within +/- 10ns accuracy between the falling edge of 1PPS and the zero crossing of 10MHz sine wave.
- Every rubidium oscillator needs periodical calibration to maintain high accuracy output. The GF-8048 has an “Automatic calibration function” by using GPS as a reference. The real time control by GPS realizes complete maintenance-free GPS-steered Frequency
- Designed specially for digital terrestrial broadcasting transmitter (Main stations/Sub stations).
- Enhance performance in combination with recommended antenna. AU-300 Multi-GNSS Timing Antenna delivers both high stability and high robustness.

	GF-8048
Grade	
Timing	●
GNSS	
GPS	●
Frequency band	
L1	●
Oscillator	
Rubidium	●
Featured	
Time pulse output(1PPS)	●
Clock output	●
Status LED	●
Antenna Detection	●
Power Switch	●
Maintenance IF Input	●
External Reference input	●
Protocol	
Protocol	NMEA 0183
Power supply	
Power-supply voltage	48VDC

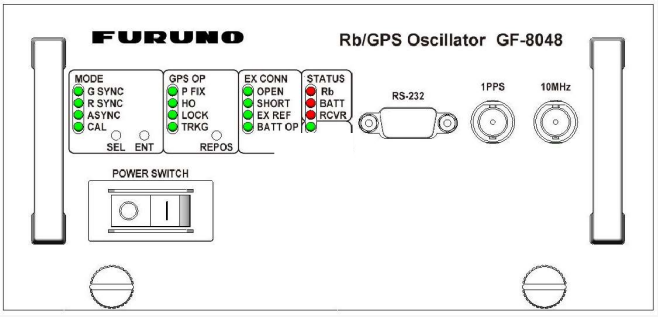
FURUNO

GPS Disciplined Oscillator

FURUNO

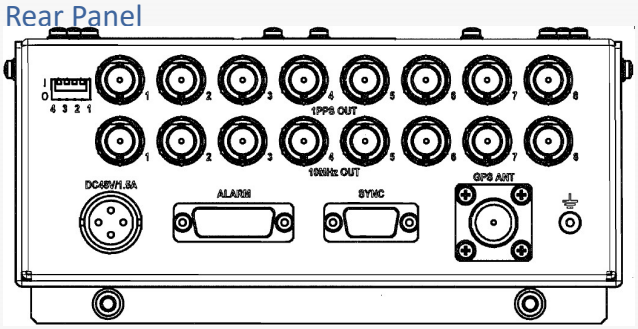
Model	GF-8048
	
GNSS Reception Capability	GPS L1C/A
GNSS Reception	12 Channels (GPS)
Sensitivity	-133dBm to -110dBm
10MHz Output (Lock State)	Frequency Accuracy : < ± 1 x 10-11
1PPS Output (Lock State)	1PPS Accuracy: < ±100ns (95%)
10MHz Output (Holdover)	Holdover: < ± 2 x 10-11 / 1h, < ± 3 x 10-11 / 12h
1PPS Output (Holdover)	1PPS Accuracy: < ±400ns/1h
10MHz Output (No GPS mode (Free running Rubidium))	Free running Rubidium: Frequency Accuracy : < ±5 × 10-10/year
Supply Voltage	48VDC (63W (MAX, startup), 25W (Typ, steady state))
Phase Noise	< -90dBc (10Hz to 1MHz, 0dBm) < -90dBc (10Hz to 10kHz, +13dBm)
Performance Assurance Temperature	-10 ° C to +45° C (Performance Assurance Temperature)
Operating Temperature	-20° C to +60° C (Operating Temperature)
Antenna Detection	Short and Open Detection
Alarm Output	Open Collector Output, LED Display
Outer Size	207mm x 327mm x 98.5mm
Protocol	NMEA 0183

Front Panel



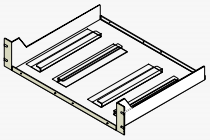
- Status LED
- Maintenance IF Input
- 1PPS Output
- 10MHz Output
- Power Switch
- Operation mode select Switch
- Operation mode confirmation Switch
- Repositioning Switch

Rear Panel

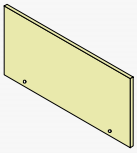


- DIP Switch
- 8 x 1PPS Output
- 8 x 10MHz Output
- Power input connector
- Alarm status output
- External Reference 1PPS input
- GPS antenna input
- Ground

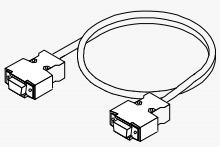
Option items



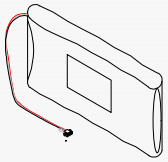
Sub chassis



Blind panel



Cable with D-sub9 pin



Ni-Cd battery

GNSS Antenna

Specifications subject to change without notice

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Product documentation :
https://www.furuno.com/en/gnss/datadownload/
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