

# Sync'n Go® -- Portable Precision Frequency Reference



**SYNC-10.00MHz.**



## FEATURES:

- Stand Alone 10.00MHz Portable Precision Frequency Reference
- World Wide Capability
- Built-in Stratum-III stability, 10.00MHz Signal tuned into 50Ω's • Synchronization circuitry providing dynamic sync capability, enabling Calibration to a known source such as; a GPS Tracked 10.00MHz reference/10.00MHz Rubidium Source/10.00MHz OCXO based reference
- Integrated re-chargeable batteries to provide true stand-alone capability in the field
- Once sync'd; guaranteed  $\pm 300$  ppb stability over  $0^{\circ}\text{C}$  to  $60^{\circ}\text{C}$
- Pocket Size - 3.50" \* 1.50" \* 1.00"; machined aluminum durable enclosure
- Accompanied with a Universal AC-DC Charger
- Continuously operable at full charge for 10-hours

## APPLICATIONS:

- Ideally suited as an in-field Calibrated Precision 10.00MHz reference for trouble shooting or tuning hardware and Base Station related equipment
- Reference source for lab use
- Reference source to drive frequency counters and other timing related hardware or instruments
- Precision Portable reference for inspection of in-field wireless transmitters

## STANDARD SPECIFICATIONS:

Parameter	Description	Value / Units
Input Reference Frequency for Sync	10.00	MHz
Output Reference Frequency	10.00	MHz
Operable Operating Range	$0^{\circ}\text{C}$ to $+60^{\circ}\text{C}$	
Synchronization accuracy	$\pm 5.00$	ppb
Frequency Drift post sync ( $25^{\circ}\text{C} \pm 10^{\circ}\text{C}$ )	$\pm 25.00$	ppb Typical
Frequency Drift post sync ( $25^{\circ}\text{C} \pm 20^{\circ}\text{C}$ )	$\pm 50.00$	ppb Typical
Frequency Accuracy Over the operating Temperature Range	$< \pm 100$ $\pm 300$	ppb Typical; Post Sync ppb Maximum; Post Sync
Load Impedance	50	$\Omega$
Charging Time	4.00	Hours maximum
Stand Alone operational time with full charge	10.00	Hours minimum
Phase Noise @ 10.00MHz Carrier		
100 Hz offset	-120	dBc/Hz typical
1,000 Hz offset	-140	dBc/Hz typical
10,000 Hz offset	-150	dBc/Hz typical
100,000 Hz offset	-155	dBc/Hz typical
1,000,000 Hz offset	-155	dBc/Hz typical
Output amplitude	6.0	dBm minimum
ALL Harmonics	-30	dBc maximum
rms jitter	$< 0.50$ ps	12kHz to 20MHz BW from the carrier

## PACKAGE OUTLINE



ABRACON IS  
ISO9001:2008  
CERTIFIED



Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale **Revised: 10.02.11**  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)

# Sync'n Go® -- Portable Precision Frequency Reference

**SYNC-10.00MHz.**



**RoHS  
Compliant**



## OPERATIONAL MANUAL

### Charge:

- 1) Plug 5V charger (or PC or any other USB power source) into a mini-USB port
- 2) "Bat" LED may turn yellow for a moment to signal that an internal battery is evaluated
- 3) "Bat" LED will flash green to signal that the battery is being charged
- 4) "Bat" LED will display solid green when the battery is fully charged

### Synchronization:

- 1) Connect a 10MHz standard to the "Ref In" input
- 2) Press "Synchronize"
- 3) "Lock" LED will turn-on yellow to signal that "Sync N Go" is evaluating the standard
- 4) If the reference is stable, the "Lock" LED will turn green to signal that the signal is locked and that the reference information is stored
- 5) If the reference is not found or it is outside a frequency range or it is not stable, the "Lock" LED will flash red
- 6) If that occurs, the "Lock" LED turns-off and the "Sync N Go" goes into a sleep mode

### Output ON (if battery charged):

- 1) Press "Power"
- 2) "ON" LED will turn green
- 3) "Sync N Go" will output a continuous RF signal on the "Out" connector

### Output ON (if battery low):

- 1) Press "Power"
- 2) "ON" LED will turn green.
- 3) "Sync N Go" will output a continuous RF signal on the "Out" connector. At the same time, "Bat" LED will slowly flash red.

### Output ON (if battery is discharged):

- 1) Press "Power"
- 2) "Bat" LED will rapidly flash red for few seconds and "Sync N Go" will immediately go back to sleep

### Output OFF:

- 1) Press "Power"
- 2) "ON" LED turns off and the "Sync N Go" goes into a sleep mode

**ATTENTION:** Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS  
ISO9001:2008  
CERTIFIED



**Designed & Manufactured in United States**  
For technical assistance, please contact: [techsupport@abracon.com](mailto:techsupport@abracon.com)

Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale **Revised: 10.02.11**  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.