Sync'n Go® -- Portable Precision Frequency Reference

SYNC-10.00MHz.

Pb RoHS Compliant

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 ±300 ppb stability over 0ºC to 60ºC
- 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	0ºC to +60ºC	
Synchronization accuracy	±5.00	ppb
Frequency Drift post sync (25ºC ± 10ºC)	±25.00	ppb Typical
Frequency Drift post sync (25ºC ± 20ºC)	±50.00	ppb Typical
Frequency Accuracy Over the operating Temperature Range	< ±100 ±300	ppb Typical; Post Sync ppb Maximum; Post Sync
Load Impedance	50	Ω
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

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

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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

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