



# TESTIME<sup>PLUS</sup><sup>TM</sup> RubiSource<sup>TM</sup>-2000

**NEW!**



## Portable Rubidium Timing Reference Source

Cost-effective timing source for telecom/metrology test/measurement applications

- ✓ SDH/SONET/PDH Jitter/Wander measurement source
- ✓ Outputs: E1/T1, 2048/1544 kHz & 5/10 MHz
- ✓ Compact, robust & lightweight
- ✓ External auto-calibration input
- ✓ Optional GPS/Cesium reference input



*The Best Investment Today  
for Delivering Superior Telecom Services!*





# LOW-COST TIMING SOURCE FOR TELECOM/METROLOGY TEST/MEASUREMENT SOLUTIONS



## NEW TESTIME<sup>PLUS</sup> RUBIDIUM SOURCE

The RubiSource-2000 is a new, low-cost portable timing reference source based on DATUM's Rubidium clock technology. It's designed for telecom and metrology test and measurement applications. The Rubidium clock provides highly accurate, stable and reliable output signals. Its fast warm-up eliminates the need of bulky backup batteries. The RubiSource can be locked to an external primary source such as a GPS or Cesium for automatic calibration of the Rubidium clock. An input reference is also provided to feed DATUM's GPS-FC product, enhancing the intrinsic Rubidium accuracy to near Cesium quality.

## RUBISOURCE-2000 APPLICATIONS

### Telecom

The RubiSource is a powerful reference source to quickly measure and test the synchronization quality of PDH/SDH/SONET digital networks. MTIE and TDEV measurements for up to 1000 seconds can be easily performed without a GPS reference. Coupled with the optional GPS-FC, the range of observation time can be largely extended to meet specific requirements.

### Metrology

Standard 5 MHz and 10 MHz reference sources are also provided for metrology and calibration laboratory equipment such as universal counters, spectrum analyzers and synthesized signal generators.

## KEY RUBISOURCE-2000 FEATURES

### Accuracy

- ✓ Frequency accuracy (factory shipment):  $+ 5 \times 10^{-11}$  @ 25°C

### Aging

- ✓ Aging:  $< 5 \times 10^{-11}$ /month,  $< 1 \times 10^{-9}$  over 10 years

### Clock

- ✓ DATUM's Rubidium LPRO product

### Output

#### Unframed Outputs

- ✓ 1 x 5 MHz Sine, 1Vrms, 50, BNC
- ✓ 1 x 10 MHz Sine, 1Vrms, 50, BNC
- ✓ 2 x 2048 kHz, G.703.10, 75 unbalanced, BNC
- ✓ 2 x 2048 kHz, G.703.10, 120 balanced, BNC Twinax
- ✓ 1 x 1544 kHz, 2.5 Vpp, 75, BNC
- ✓ 1 x 1544 kHz, 3 Vpp, 120, BNC Twinax

#### Framed Outputs

- ✓ 1 x 2.048 Mbps (E1), G703.6, HDB3, 75 unbalanced, BNC
- ✓ 1 x 2.048 Mbps (E1), G703.6, HDB3, 120 balanced, BNC Twinax
- ✓ 1 x 1.544 Mbps (T1), AMI, BNC
- ✓ 1 x 1.544 Mbps (T1), AMI, BNC Twinax

### Calibration Input

- ✓ 1x auto-calibration input: 10/5 MHz (LED status of external calibration)
- ✓ 1x input reference: DATUM's GPS-FC product

### Power Supply

- ✓ 100-240 Vac, 50-60 Hz,  $< 80$  W

### Size

- ✓ 98 x 253 x 365 mm or 3.85 x 9.96 x 14.37 inch (WxHxD)

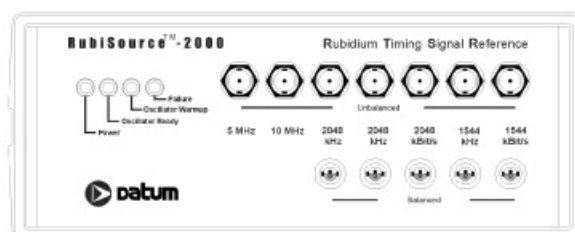
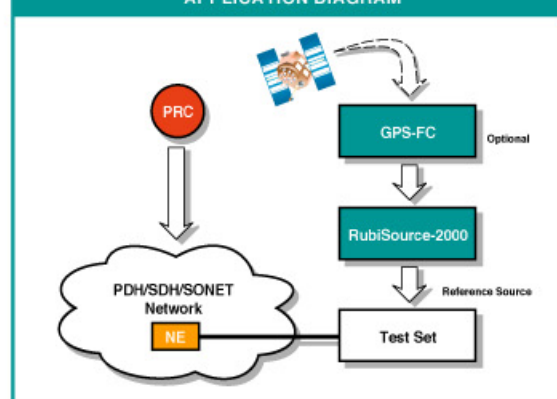
### Weight

- ✓ About 5 kg or 11 pds

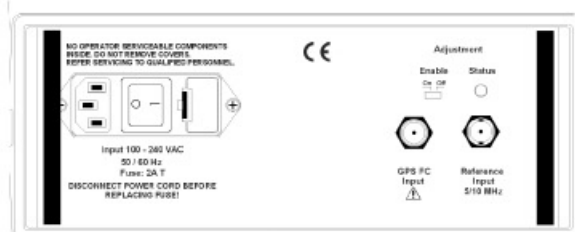
### Standards

- ✓ EN 61326-1:1997
- ✓ EN 61010-1:1993

## APPLICATION DIAGRAM



Front View



Rear View

## ONLINE TESTIME<sup>PLUS</sup> DATA SUPPORT

Visit our web site today at [www.datum.com](http://www.datum.com) for the latest information, including application notes, references, Q&A assistance, and technical support.



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