

Features

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

RUBISOURCE 2000



RUBIDIUM PRODUCTS Modules, Instruments and Militarized Components

Overview

Product Description

The RubiSource-2000 is a 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 for bulky backup batteries. The RubiSource 2000 can be locked to an external primary source such as a GPS receiver or Cesium Standard for automatic calibration of the Rubidium clock. An input reference is also provided to accept Datum's GPS FC product, enhancing the intrinsic Rubidium accuracy to near Cesium quality.

Applications

Telecom

The RubiSource 2000 is a powerful reference source, used to enable fast measurement and testing of 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.



datum

Timing, Test & Measurement

Portable Rubidium Timing Reference Source

Specifications

Accuracy:

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

Aging:

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

Output:

Unframed Outputs

1 x 5 MHz Sine, 1Vrms, 50 Ω , BNC

1 x 10 MHz Sine, 1Vrms, 50 Ω , BNC

2 x 2048 kHz, G.703/13, 75 Ω unbalanced, BNC

2 x 2048 kHz, G.703/13, 120 Ω unbalanced, BNC Twinax

1 x 1544 kHz, 2.5 Vpp, 75 Ω , BNC

1 x 1544 kHz, 3 Vpp, 120 Ω , BNC Twinax

Framed Outputs

1 x 2.048 kbps (E1), G703/9, HDB3, 75 Ω unbalanced, BNC

1 x 2.048 kbps (E1), G703/9, HDB3, 120 Ω balanced, BNC, Twinax

1 x 1.544 kbps (T1), AMI, BNC

1 x 1.544 kbps (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:

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

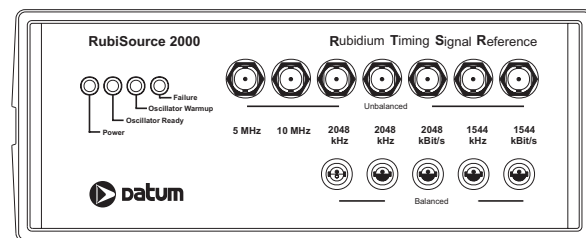
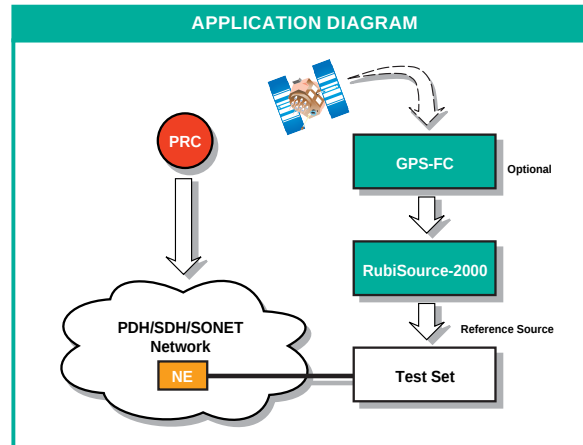
Weight:

11 lbs. (5 kg) Nominal

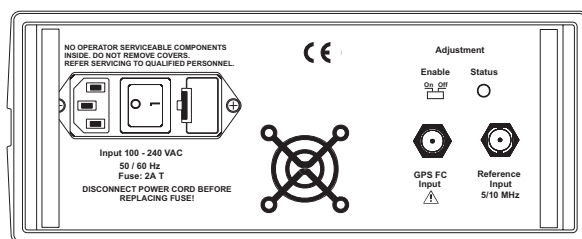
Standards:

EN 61326-1:1997

EN 61010-1:1993



Front View



Rear View

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For more information about the complete range of Quality Timing Products from the Datum Group of Companies, Call (800) 544-0233 in the US and Canada.

Or visit www.datum.com for continuously updated specifications and information.

Specifications subject to change without notice.

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