

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

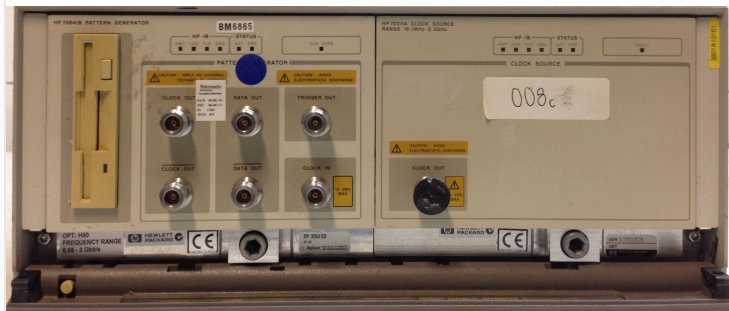
Data Sheet

August 12, 2026

HP / AGILENT

HP / Agilent 70841B OPT H30 w/ 70311A Clock Source and 70001A Mainfram

The HP/Agilent 70841B OPT H30 is a modular measurement system consisting of the 70311A clock source and 70001A mainframe. This system provides a versatile platform for various testing applications, offering precision and reliability in a modular format.

**MODEL****HP / Agilent
70841B / 70311A /
70001A****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****70841B / 70311A /
70001A****LISTING**<https://aumictechlabs.com/products/70841b-70311a-70001a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 70841B OPT H30 is a modular measurement platform integrating the 70311A Synthesized Clock Source with the 70001A Mainframe for high-speed digital testing and error performance analysis. This system combines precise clock generation with flexible modular architecture, enabling complex test scenarios across multiple instrument configurations. Technical Specifications 70311A Synthesized Clock Source Frequency range: 16 MHz to 3.3 GHz, 1 Hz steps Output level: ± 3 dBm Frequency stability: ± 2 ppm/year (post-1 year aging), ± 6 ppm (0 to 40°C) Spectral purity: Harmonics < -30 dBc Phase noise at 3.3 GHz: -75 dBc/Hz @ 1 kHz offset; -115 dBc/Hz @ 20 kHz offset Interface: AC coupled, 50 ohm, N-type female connector Module width: 4 MMS slots 70001A Mainframe Module slots: 8 total, single or multiple-width configurations

Primary power output: 24.3 Vac (average) at 40 kHz, up to 200 Watts capacity Auxiliary power: 5 VDC for MSIB, DC for cooling fans, TTL line synchronization Cooling: Dual fan system

Key Features Non-volatile memory stores up to 10 user-definable instrument setups Dual communication buses: MSIB (high-speed inter-module) and GPIB (external instrument control and VXIbus compatibility) Front panel status indicators: Gating, Clock Loss, Data Loss, Sync Loss, Errors, HP-IB/MSIB EIA rack compatibility with integral bails and benchtop handles Rugged design with strong EMC performance for industrial environments

Typical Applications High-speed digital pattern generation and error performance measurement; precision clock reference for complex test sequences; multi-module test system configuration.

Compatibility & Integration The 70001A mainframe accommodates standard HP Modular Measurement System (MMS) plug-in modules. MSIB provides inter-module and external device communication; GPIB enables integration with host computers and other laboratory instruments.

Features & description

From manufacturer datasheet

Features

- 70001A MMS mainframe • 70841B pattern generator with Option H30 • 70311A clock source module (16 to 3300 MHz class literature) • PRBS, zero-substitution, mark-density, and user-word patterns

Applications

- High-speed digital pattern generation for BER systems • Clocked PRBS / user-pattern stimulus in MMS racks • Telecom/datacom component verification

70841B70311A70001A Characteristics / Specifications

PARAMETER	VALUE
Model	70841B / 70311A / 70001A
Manufacturer	HP / Agilent
Instrument Type	MMS Pattern Generator System
Alias	70841B Opt H30; 70311A; 70001A
Mainframe	70001A
Pattern generator	70841B
Clock source	70311A 70841B standard bit rate class: 100 Mb/s to 3 Gb/s 70311A frequency class: 16 MHz to 3300 MHz 70841B module width: 4 MMS slots 70841B data/clock jitter class: less than 15 ps rms
Patterns	PRBS, zero substitution, variable mark density, user word Notes Confirm exact Option H30 meaning on the installed 70841B and which clock/display modules are present. Specs from HP 71600B / 70841B / 70311A literature.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

performance systems; the 70311A provides the clock stimulus typically required by 71600B-series pattern generators.

Applications

- High-speed digital pattern generation for BER systems
- Clocked PRBS / user-pattern stimulus in MMS racks
- Telecom/datacom component verification

Key Features

- 70001A MMS mainframe
- 70841B pattern generator with Option H30
- 70311A clock source module (16 to 3300 MHz class literature)
- PRBS, zero-substitution, mark-density, and user-word patterns

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	70841B / 70311A / 70001A
Manufacturer	HP / Agilent
Instrument Type	MMS Pattern Generator System
Alias	70841B Opt H30; 70311A; 70001A

Mainframe: 70001A
Pattern generator: 70841B
Option: H30
Clock source: 70311A
70841B standard bit rate class: 100 Mb/s to 3 Gb/s
70311A frequency class: 16 MHz to 3300 MHz
70841B module width: 4 MMS slots
70841B data/clock jitter class: less than 15 ps rms
Patterns: PRBS, zero substitution, variable mark density, user word

Notes

Confirm exact Option H30 meaning on the installed 70841B and which clock/display modules are present. Specs from HP 71600B / 70841B / 70311A literature.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 12, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.