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Data Sheet

August 13, 2026

ROHDE & SCHWARZ

Rohde & Schwarz ESIB7 EMI Test Receiver

Rohde & Schwarz ESIB7 EMI Test Receiver 20 Hz to 7 GHz The R&S ESIB7 is the 7 GHz member of the ESIB EMI test receiver family (order 1088.7490.07). Input 1 covers 20 Hz to 7 GHz; input 2 covers 20 Hz to 1 GHz with pulse protection. It combines a CISPR 16-1-1 receiver with a high-end spectrum analyzer. A 20 dB preamplifier from 9 kHz to 7 GHz sits after preselection. Parallel CISPR and RMS detectors, 200 Hz / 9 kHz / 120 kHz / 1 MHz CISPR bandwidths, and plus/minus 1 dB level accuracy to 1 GHz support commercial and military EMI. The R&S ESIB7 is the 7 GHz member of the ESIB EMI test receiver family (order 1088.7490.07). Input 1 covers 20 Hz to 7 GHz; input 2 covers 20 Hz to 1 GHz with pulse protection. It combines a CISPR 16-1-1 receiver with a high-end spectrum analyzer. A 20 dB preamplifier from 9 kHz to 7 GHz sits after preselection. Parallel CISPR and RMS detectors, 200 Hz / 9 kHz / 120 kHz / 1 MHz CISPR bandwidths, and plus/minus 1 dB level accuracy to 1 GHz support commercial and military EMI.



MODEL

Rohde & Schwarz ESIB7

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

ESIB7

LISTING

<https://aumictechlabs.com/products/esib7-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Rohde & Schwarz ESIB7 is an EMI test receiver engineered for electromagnetic compatibility (EMC) compliance testing across civilian and military regulations. It combines high sensitivity, extensive dynamic range, and precise selectivity with the operational flexibility of a spectrum analyzer. The instrument meets CISPR 16-1-1 and supports measurements per CISPR, EN, VDE,

ANSI, FCC, BS, ETS, VCCI, MIL-STD, VG, DEF-STAN, DO160, and GAM EG13 standards. Technical Specifications Frequency Coverage Input 1: 20 Hz to 7 GHz Input 2: 20 Hz to 1 GHz with additional pulse protection Frequency counter resolution: 0.1 Hz to 10 kHz (selectable) Display range: 0 Hz to 7 GHz Signal Detection and Processing Parallel detectors: Peak (PK), Average (AV), Quasi-Peak (QP), CISPR Average, and RMS Resolution bandwidths in receiver mode: 200 Hz, 9 kHz, 120 kHz, 1 MHz (-6 dB) Receiver mode preselection: Fixed, <150 kHz bandwidth (-6 dB) Analyzer mode preselection: Selectable Preselection architecture: Fixed-tuned filters to 2 MHz; tracking filters 2 MHz to 1000 MHz Receiver Performance Noise figure: 10 dB typical 1 dB compression point: +10 dBm Preamplifier: Integrated 20 dB (selectable), 1 kHz to 7 GHz standard; optional extension beyond 7 GHz (R&S ESIB-B2) High intermodulation suppression Low SSB phase noise Low inherent noise and measurement uncertainty High measurement speed Key Features Dual-input architecture with differential pulse protection on Input 2 Fixed and tracking preselection filters reduce input mixer voltage levels Integrated preamplifier positioned between RF preselection and mixer for overload protection Mode flexibility: Receiver mode for standards compliance; analyzer mode for diagnostic and development work Selectable resolution bandwidths and detectors per CISPR 16 and MIL specifications Typical Applications Pre-compliance and diagnostic EMI testing during product development Certification measurements for final compliance validation Radiated and conducted emission measurements per international standards Transient and impulse signal analysis with quasi-peak detection Compatibility & Integration Supports measurements across CISPR, EN, VDE, ANSI, FCC, BS, ETS, VCCI, MIL-STD, VG, DEF-STAN, DO160, and GAM EG13 standards. Operates as both dedicated EMI receiver and spectrum analyzer for flexible test workflows.

Features & description

From manufacturer datasheet

Features

- Three fixed-tuned preselection filters (tracking set grows on ESIB26/40) • Autorange of RF/IF attenuation and gain • 24 cm color LCD; analog bar per detector • Four traces, up to 80 000 values (250 000 with one trace) • Windows NT internal controller; transducer power/coding socket

Applications

- CISPR / EN / FCC / VDE commercial EMI to 7 GHz • MIL-STD, DO-160, VG, DEF-STAN military EMI • CISPR 25 vehicle-antenna measurements • Spectrum analysis: noise, ACP, phase noise, time domain • Preview peak plus final QP / CISPR-average

ESIB7 Characteristics / Specifications

PARAMETER	VALUE
Model	ESIB7
Manufacturer	Rohde & Schwarz
Instrument Type	EMI test receiver / spectrum analyzer
Alias	ESIB 7; R&S ESIB7
Order Number	1088.7490.07
Frequency Range Input	20 Hz to 7 GHz
Frequency Resolution	0.01 Hz
CISPR Bandwidths	200 Hz, 9 kHz, 120 kHz, 1 MHz
Analyzer Bandwidths	1 Hz to 10 MHz, 1/2/3/5 steps
MIL Bandwidths	10 Hz to 1 MHz plus 10 MHz
Preamplifier Gain	20 dB, 9 kHz to 7 GHz
Preselection	3 fixed tuned filters (receiver fixed, analyzer selectable)
Detectors	PK, AV, CISPR AV, QP, RMS (max 4 parallel)
Display Range	noise floor to 137 dBµV
RF Attenuator	0 dB to 70 dB in 10 dB steps
Level Error to 1 GHz	plus/minus 1 dB
Frequency Response to 1 GHz	plus/minus 0.5 dB (analyzer, 10 dB att)
Frequency Response 1 to 7 GHz	plus/minus 1 dB
VSWR Receiver att 10 dB to 1 GHz	less than 1.2
VSWR Receiver att 0 dB to 1 GHz	less than 2
VSWR to 3.5 GHz att 10 dB	less than 1.5
VSWR to 7 GHz att 10 dB	less than 2.0
Input 2 Connector	N female, 50 ohm
Display	24 cm LC color
Time Domain Resolution	50 ns

PARAMETER	VALUE
Trace Memory	4 traces x 80 000 (or 1 × 250 000)
Reference Aging per Day	1e-9
Reference Aging per Year	2e-7
Reference Temperature Drift	5e-8 (0 C to 50 C)
Sibling ESIB26 Range	20 Hz to 26.5 GHz
Sibling ESIB40 Range	20 Hz to 40 GHz
Mixer Option	FSE-B21 not applicable to ESIB7 upper band (26/40 only) Notes Specs from the R&S ESIB data sheet. This file is the 7 GHz ESIB7. ESIB-B2 microwave preamp is for ESIB26/40, not this model. Confirm firmware and installed analyzer options.
Spectrum analysis	noise, ACP, phase noise, time domain
Attenuation	and gain - 24 cm color LCD; analog bar per detector - Four traces, up to 80 000 values (250 000 with one trace) - Windows NT internal controller; transducer power/coding socket

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.

Specifications	
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Frequency Response to 1 GHz	plus/minus 0.5 dB (analyzer, 10 dB att)
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Notes
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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

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<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.