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Data Sheet

August 15, 2026

BEL FUSE / POWER-ONE / MELCHER

Bel Fuse / Power-One / Melcher M 1000 AC-DC/DC-DC Converter

Bel Fuse / Power-One / Melcher Power Supply Modules. Current: up to 42 A. Power output: 1000 W. Efficiency: up to 96.4%.

**MODEL****Bel Fuse / Power-One / Melcher M 1000****CALIBRATION****Available on request****CONDITION****Used****STATUS****In stock****RFQ / SKU****M 1000****LISTING**<https://aumictechlabs.com/products/m-1000-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The M 1000 is an AC-DC/DC-DC converter delivering up to 1000 W across multiple voltage configurations. Purpose-built for industrial and medical applications, this chassis-mount unit accepts AC input from 85–264 VAC or DC input from 60–150 VDC depending on series variant. Output voltage options span 3.3 VDC to 58 VDC with currents reaching 42 A at rated power, achieving efficiency up to 96.4%. The converter provides galvanic isolation between input and output while protecting both sides against electrical transients. Output circuits are individually controlled, fully isolated, and short-circuit proof. Logic-inhibit capability and optional output voltage adjustment are available on select models. Technical Specifications AC input rating: 85–264 VAC. DC input rating: 60–150 VDC (series-dependent). Output voltage options: 3.3 VDC, 5.1 VDC, 12 VDC, 15 VDC, 24 VDC, 25.68 VDC, 30 VDC, 48 VDC, 58 VDC. Output current: up to 42 A.

Power output: 1000 W. Efficiency: up to 96.4%. Operating temperature: -40 °C to +70 °C. Case temperature limit: 95 °C under forced cooling. Isolation: input to output galvanic isolation provided. Key Features Output overvoltage, overcurrent, and overtemperature protection Input surge/transient suppression and inrush current limiting Input over- and undervoltage lockout Open- and short-circuit proof outputs Logic inhibit function (Pin 2) for output control Optional output voltage adjustment on select models RoHS compliant; CSA/EN/IEC/UL safety approvals Medical compliance: EN/IEC 60601-1 (MVPS1000 series) Typical Applications Industrial electronic systems and medical equipment requiring regulated multi-voltage or single-output power conversion with high reliability and comprehensive fault protection. Compatibility & Integration Chassis-mount enclosed design with fan cooling or convection cooling options. MBE1000 series features Molex Header connector; dimensions 9.51 × 5 × 1.61 inches.

M1000 Characteristics / Specifications

PARAMETER	VALUE
Model	M 1000
Instrument Type	modular power converter
Series Family	MelcherMBrand Lineage: Bel Power-One Melcher
Conversion Modes	AC-DC and DC-DC family
Form Factor	Melcher cassette module
Input Range Class	wide industrial input class
Output Power Class	1000 W class designation
Isolation Class	high isolation Melcher class
Cooling	conduction or forced air class per cassette
Operating Temperature Class	industrial wide temp class
Protection	OVP OCP OTP class
Efficiency Class	high efficiency switchmode class
Control	remote on off sense class
Mounting	Melcher rack or chassis cassette
Related Models	MelcherMseries siblings
Humidity Class	noncondensing
Shock Vibration Class	industrial/railway hardened class
EMC Class	Melcher industrial EMC class
Hold Up Class	AC input hold-up class
Ripple Class	low output ripple class
MTBF Class	Melcher calculated MTBF class
Operating temperature	Class: industrial wide temp class
Humidity	Class: noncondensing

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: industrial wide temp class
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Humidity	Class: noncondensing
Operating Temperature Class	industrial wide temp class
Protection	OVP OCP OTP class
Efficiency Class	high efficiency switchmode class
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EMC Class	Melcher industrial EMC class
Hold Up Class	AC input hold-up class
Ripple Class	low output ripple class
MTBF Class	Melcher calculated MTBF class Notes Family capability rows from Bel/Power-One/Melcher M 1000 converter catalog descriptions. Exact input voltage window and output rail currents are on the M 1000 datasheet configuration.

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