A6500-UM

Universal Two-Channel Machinery Measurement Card

Engineering reference for system fit, interface boundaries and exact-model technical decisions.

01 System position

Installed role

Universal Two-Channel Machinery Measurement Card

Host platform

AMS 6500 machinery protection system

Evidence source

Emerson A6500-UM Universal Measurement Card operating manual MHM-97873

Identity boundary

Use the complete marking and explicitly documented family relationships only.

02 Functional path

Field / companion side	Installed sensor, load, network, terminal or actuator
Exact product role	A6500-UM - Universal Two-Channel Machinery Measurement Card
Host-system side	AMS 6500 machinery protection system
Decision output	Verified interface, configuration and acceptance boundary

03 Selection-critical relationships

Measurement channels	Map every configured path; the documented reference is 2.
Board format	Use 100 mm x 160 mm only within the documented board format boundary.
Rack width	Use 6 HP only within the documented rack width boundary.
Rack height	Use 3 RU only within the documented rack height boundary.
Power consumption	Design the connected circuit around 6 W maximum; verify at the installed terminals.
Protection degree	Confirm the cabinet or field environment remains within IP20.

04 Engineering data map

Electrical / signal domain

Measurement channels	2
Board format	100 mm x 160 mm
Rack width	6 HP
Rack height	3 RU

Interface / processing domain

Power consumption	6 W maximum
Protection degree	IP20
Operating temperature	-20 to +70 deg C
Storage temperature	-40 to +85 deg C

Environmental / configuration domain

Relative humidity	5 to 95%, non-condensing
Vibration resistance	1 mm peak-to-peak at 2 to 13.2 Hz; 0.7 g at 13.2 to 150 Hz
Shock resistance	15 g, 11 ms

05 Diagnostic interpretation matrix

Observed issue involving Measurement channels	Compare the installed condition with 2; isolate field, interface and configuration causes before replacing hardware.
Observed issue involving Board format	Compare the installed condition with 100 mm x 160 mm; isolate field, interface and configuration causes before replacing hardware.

Observed issue involving Rack width	Compare the installed condition with 6 HP; isolate field, interface and configuration causes before replacing hardware.
Observed issue involving Rack height	Compare the installed condition with 3 RU; isolate field, interface and configuration causes before replacing hardware.
Observed issue involving Power consumption	Compare the installed condition with 6 W maximum; isolate field, interface and configuration causes before replacing hardware.
Observed issue involving Protection degree	Compare the installed condition with IP20; isolate field, interface and configuration causes before replacing hardware.
Observed issue involving Operating temperature	Compare the installed condition with -20 to +70 deg C; isolate field, interface and configuration causes before replacing hardware.
Observed issue involving Storage temperature	Compare the installed condition with -40 to +85 deg C; isolate field, interface and configuration causes before replacing hardware.
Observed issue involving Relative humidity	Compare the installed condition with 5 to 95%, non-condensing; isolate field, interface and configuration causes before replacing hardware.
Observed issue involving Vibration resistance	Compare the installed condition with 1 mm peak-to-peak at 2 to 13.2 Hz; 0.7 g at 13.2 to 150 Hz; isolate field, interface and configuration causes before replacing hardware.
Observed issue involving Shock resistance	Compare the installed condition with 15 g, 11 ms; isolate field, interface and configuration causes before replacing hardware.

06 Engineering evidence record

Complete marking	A6500-UM plus visible revision and label details
Installed relationship	Verify the A6500-UM marking, rack slot, channel assignments, installed transducer families and saved configuration version.
Companion boundary	Load the verified two-channel configuration and compare live signals before enabling protection logic; a default universal-card setup is not acceptable.
Configuration authority	Approved project backup, drawing or validated application record
Acceptance evidence	Recorded readings, diagnostic state and controlled functional result

07 Source and applicability ledger

Manufacturer reference	Emerson A6500-UM Universal Measurement Card operating manual MHM-97873
Exact-model scope	A6500-UM
System scope	AMS 6500 machinery protection system
Use limit	Family values apply only where the manufacturer relationship is explicit; verify the installed execution.

08 Separate verified listings

Emerson PR6423/012-130 CON021	Eight-Millimetre Eddy-Current Sensor and Converter Assembly; separate listing, not an automatic substitute.
Emerson PR6423/10R-010 CON021	Eight-Millimetre Eddy-Current Sensor and Converter Assembly; separate listing, not an automatic substitute.
Emerson KJ2003X1-BK1 12P4686X052	SD Plus Process Controller; separate listing, not an automatic substitute.
Emerson KJ2201X1-BA1 12P3162X092 SLS1508 VS3202	SLS1508 Safety Logic Solver Assembly; separate listing, not an automatic substitute.
Emerson KJ3202X1-BA1 12P2536X042	Eight-Channel 24 V DC High-Side Discrete Output Card; separate listing, not an automatic substitute.
Emerson KJ3203X1-BA1 12P3270X032 CE4001S2T2B4	Thirty-Two-Channel Dry-Contact Discrete Input Assembly; separate listing, not an automatic substitute.
Emerson KJ3241X1-BA1 12P2506X062 VE4006P2	Two-Port Serial Interface Card Assembly; separate listing, not an automatic substitute.
MTL 8103-AI-TX	Eight-Channel 4-20 mA Analog Input Module; separate listing, not an automatic substitute.

Discuss system fit and exact marking with Apter Power.
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Quote the complete reference: A6500-UM