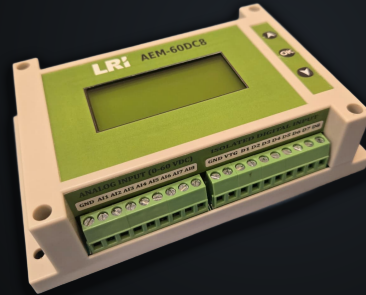


**INDUSTRIAL DC MONITORING · MULTI-CHANNEL**

See every volt. Trust every byte.

8 isolated DC channels · Modbus RTU · industrial LCD ·
Certifiable cybersecurity.

The AEM-60DC8 is LRI's platform for DC voltage supervision
in industrial cabinets, battery banks, telecom sites and critical
busbars. Rugged hardware, auditable RTOS and a firmware
that is truly **Secure by Design**.

SECURE BY DESIGN**8 DC channels · 0–60 V**

Isolated, with built-in protection. 100 ms refresh rate.

Modbus RTU over RS-485

Full telemetry via Modbus · ready for SCADA, PLC and remote
supervision.

16×4 LCD + 3 keys + buzzer

Local operation without a PC. 53 screens, 20-item menu, RGB
LED.

Ed25519-signed firmware

9-layer boot validation, anti-rollback, anti-brick by
construction.

TYPICAL APPLICATIONS

24/48 V battery banks

Rectifiers and UPS systems

Telecom shelters

Solar generation cabinets

Substations and DC distribution

SCADA / PLC integration

SECURE BY DESIGN**Secure by Design – defense in depth**

Cybersecurity as a design pillar – not an afterthought.

Signed firmware · Ed25519

4-slot key whitelist in the bootloader. No
valid key, no boot.

Boot validation L1–L9

9 verification layers before control transfers
to the app.

Anti-rollback + anti-brick

Minimum generation enforced. Bootloader
immutable. Bank 1 always intact.

Modbus audit trail

4 forensic counters (40160–40163) + signed
JSONL chain in the field.

Rate-limit + 3-step unlock

Privileged commands require 3 Modbus
writes + strong password.

IEC 62443-4-2 SL2

Posture documented. Threat model A1–A15
with mitigation per vector.

COMPLIANCE & CERTIFICATIONS**RoHS**

Directive 2011/65/EU

IN VALIDATION**CE**

European CE Mark

IN VALIDATION**IEC 62443-4-2**

Industrial Security SL2

ALIGNED**Modbus RTU**

Compliant · IDA spec

COMPLIANT**ABNT NBR**

Industrial panels (BR)

COMPLIANT

Request a sample · sales@lri.com.br ·
aem.lri.com.br

