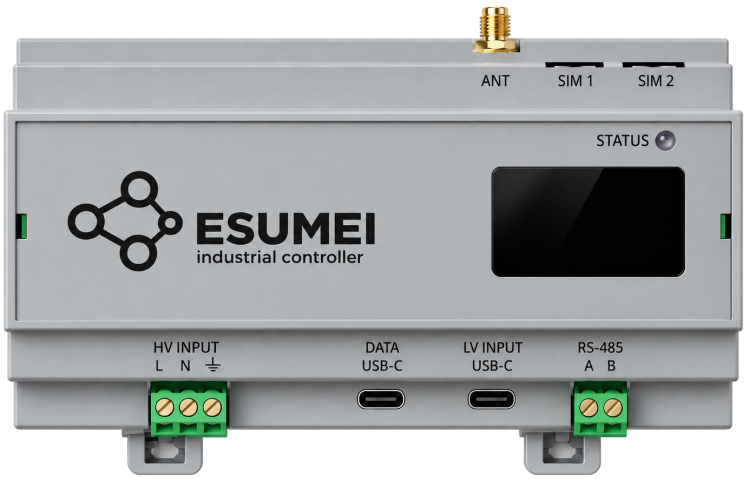
ESUMEI
industrial controller

ESUMEI Industrial Controller Gen III

Technical specifications



Industrial monitoring, built for the edge

The ESUMEI G3 combines isolated AC/DC input power, RS-485 Modbus RTU, dual-SIM cellular communications and local store-and-forward buffering in a DIN-rail or panel-mount controller.

Power input	Compute	Communications
24-240 VAC, single phase 24-250 VDC 15 W maximum system power	STM32 Arm Cortex-M33 ESUMEI OS Internal storage	RS-485 / Modbus RTU 4G LTE Cat-1bis, 2G fallback Dual SIM, external SMA antenna

Power and backup

Parameter	Specification
HV AC input	24-240 VAC, single phase
HV DC input	24-250 VDC
LV input	USB-C, 5 VDC, up to 3 A
Maximum system power	15 W
Input isolation	Isolated power input
Backup power	Integrated Li-ion backup battery and charger; supports operating modes during loss of external supply

Compute, storage and data continuity

Parameter	Specification
Microcontroller	STM32, Arm Cortex-M33
Edge software	ESUMEI OS
Local buffering	Store-and-forward; data is retained during communications interruptions and transmission resumes when connectivity returns

Communications

Interface	Specification
Field bus / protocol	RS-485 / Modbus RTU
Field bus isolation	Galvanic / port isolation
Cellular	4G LTE Cat-1bis with 2G fallback
SIM / antenna	Dual SIM / external SMA antenna
Transmission / connection	TLS-encrypted; outbound-only connection model

Mechanical, environmental and firmware

Parameter	Specification
Mounting	DIN-rail / panel
Operating temperature	-20°C to +70°C
Enclosure protection	IP54 / IP65 (source does not assign a rating to a specific configuration)
Firmware updates	Signed, rollback-protected, over-the-air

Compatible multifunction meters

Schneider METSEPM5110; Eastron SDM630MCT; Selec MFM384; Selec MFM384+.

Additional integrations are available following technical review. Unlisted devices, drivers, protocols, schemas or platform connectors may require an accepted quotation, change request or statement of work.

Warranty Two-year manufacturer defect warranty.

Specification source: supplied ESUMEI G3 Industrial Controller - Technical Specifications PDF, dated 17 September 2026. Product render is illustrative; verify physical terminal markings on the delivered unit.