

EMS Controller

WL-EMS-1000

Application scenarios

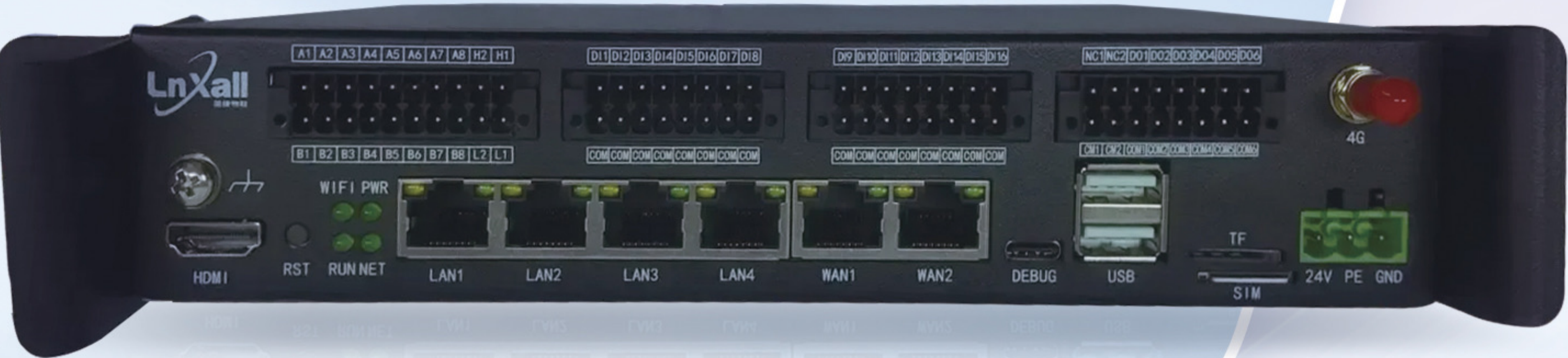
Full-scenario support

Energy storage: peak shaving and valley filling, demand control, backflow prevention, load tracking, etc.
Microgrids: dynamic capacity expansion, backup power, self-consumption, planned operation, etc.

Product Introduction

The Lnxall IoT WL-EMS-1000 series EMS controller,integrates multiple cutting-edge technologies such as edge computing, data storage, communication management, security protection, and local visualization. It combines a Battery Management System (BMS), a Power Conversion System (PCS), a Power Environment Monitoring System, a Fire Protection System, DI/DO devices, and other components to form an integrated 3S (EMS, BMS, and PCS) energy management system solution. The EMS controller is a crucial component of energy management systems, enabling cloud-edge collaboration, edge-device linkage, decentralized computing power, and regional autonomy. It is widely used in smart grids, power IoT, industrial internet, and microgrids.

Overseas version available: WL-EMS-1000 (Overseas)



TUV/CE Certified



RoHS Compliance

EMS controller
WL-EMS-1000

Product Name	EMS Controller	WL-EMS-1000	WL-EMS-1000S
Power supply	DC 24V/1A or DC 12V/2A	Reference power supply range DC 12V ~ 36V	Reference power supply range DC 12V ~ 36V
Operating power consumption	Average 10W	Full load operation < 15W	Full load operation < 15W
Hardware parameters	ARM industrial-grade CPU	4 cores 1.8 GHz	4 cores 1.8 GHz
	8 GB eMMC storage	Onboard 8 GB Flash	Onboard 8 GB Flash
	2GB LPDDR4	Onboard 2 GB memory	Onboard 2 GB memory
	Onboard hard drive	Hard drive model options: 256GB / 512GB	Hard drive model options: 256GB
	LCD screen	/	Integrated 7-inch standard creen with a resolution of 1024×600
	Main unit size	21 × 16.5 × 4.5cm (L×W×H)	21 × 16.5 × 5.3cm (L×W×H)
	Approximate weight	1.4Kg	1.65Kg
Communication interface	Wireless (Optional)	One 4G antenna; supports full network 4G Cat 1	One 4G antenna; supports full network 4G Cat 1
	Ethernet	2-way WAN, 4-way LAN	2-way WAN, 4-way LAN
	Industrial serial port	8-way RS485	8-way RS485
	CAN	2	2
	DI	16	16
	DO	8	8
	Management methods	WeBUI	WeBUI
Other	MTBF	> 100000 h	> 100000 h
	Operating temperature	-20℃ ~ 60℃	-20℃ ~ 60℃
	Storage temperature	-40℃ ~ 85℃	-40℃ ~ 85℃
	Operating humidity	≤ 95% RH (No condensation)	≤ 95% RH (No condensation)
	Test certificate	TUV/CE、RoHS2.0、Three Proofings	TUV/CE、RoHS2.0