



■ Features

- IEC 61850-3 and IEEE 1613 compliant
- Support Intel® Celeron or Core i3/i7 CPU
- Optional redundant power supplies
- Rich, flexible and expandable I/O interface
- Wide temperature range (-40~70°C)
- ESD and surge protection on serial ports
- Support 1333/1600MHz DDR3 memory up to 8GB
- Fanless design with corrugated aluminium

■ Preliminary Specifications

Processor System

CPU	Intel® Celeron® 847E, Core i3-3217UE or i7-3517UE
Frequency	1.1, 1.3 or 1.5 GHz
Core Number	2
BIOS	AMI SPI Flash BIOS
Chipset	Intel® HM65

Memory

Technology	DDR3, 1333 or 1600 MHz
Max. Capacity	8 GB
Socket	1 x 204-pin SODIMM

Graphic

Controller	Intel® HD Graphics 4000
Display Interface	VGA port

Ethernet

Controller	Intel® 82583V
Speed	10/100/1000 Mbps
Interface	8 x 10/100/1000M bps Ethernet ports
Protection	1.5KV magnetic isolation protection

Storage

SATA	2 x 2.5" HDD/SSD drive bay
CF	1 x type VIII CF socket support CF-SATA

I/O

Serial Port	- 2 x DB9 Male (COM1/COM2) on board with isolation supports software selectable RS-232/422/485 - 2 x 2 x10 terminal block with isolation supports software selectable for 8x RS-232/422/485
Isolation Protection	2KV Digital Isolation
ESD Protection	15KV ESD Protection
USB 2.0	2 x type A
Expansion	1 x PCIe expansion
KB/MS	1 x PS/2 interface
LED	PWR, Storage, RX/TX

Watchdog Timer

Watchdog timer 256 level time interval system reset, software programmable

Power

Support Dual Power Module	1.36~48 Vdc 2.90-264 Vac / 100-300 Vdc
Connector	3-pin connector

Environment

Operating Temperature	-40 ~ 70°C
Storage Temperature	-40 ~ 85°C
Relative Humidity	5% ~ 95%, non-condensing

Mechanical

Dimension (W x H x D)	440 x 88 x 301.2 mm
Construction	Aluminum + Steel
Weight	6 kg
Mounting	Rackmount

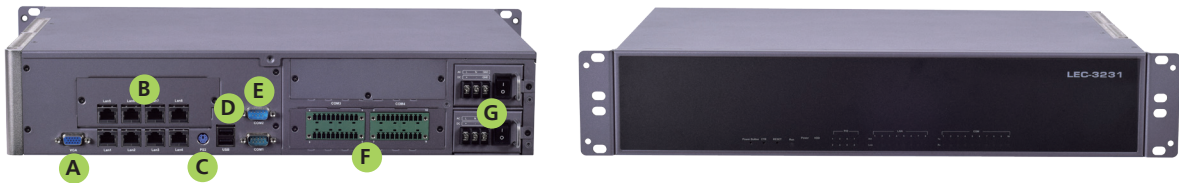
Driver Support

Microsoft Windows	Windows 7, Windows 7 Embedded
Linux	Linux (Ubuntu)

Certification

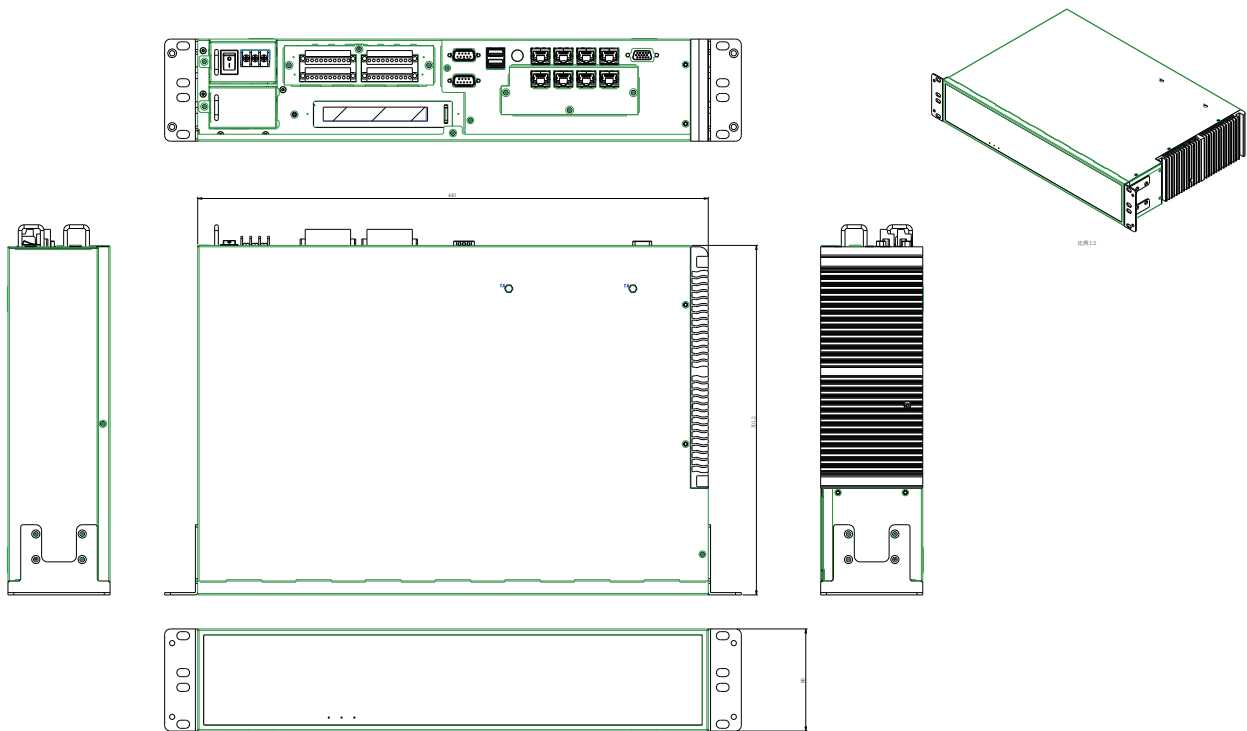
EMC	CE, FCC Class A
Compliance	RoHS, IEC 61850-3, IEEE 1613

■ Product I/O View



- A** VGA port
- B** RJ45 LAN ports
- C** PS/2
- D** USB x 2
- E** DB9 COM ports x2
- F** Serial COM ports
- G** Power supply x 2

■ Dimensions (WxHxD): 440 x 88 x 301.2 mm



■ Ordering Information

LEC-3231B	Fanless Industrial PC with Intel® Celeron® 847E CPU, 8 x GbE, 10 x RS-232/422/485 ports
LEC-3231C	Fanless Industrial PC with Intel® Core™ i3-3217UE CPU, 8 x GbE, 10 x RS-232/422/485 ports
LEC-3231D	Fanless Industrial PC with Intel® Core™ i7-3517UE CPU, 8 x GbE, 10x RS-232/422/485 ports
LEK-3231-PW1	Power Module for LEC-3231, 36~48 Vdc
LEK-3231-PW2	Power Module for LEC-3231, 90~264 Vac/100-300 Vdc

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