

LEC-6020

**Fanless Industrial DIN Rail Security
Box IPC with Intel® Atom™ N2600 CPU**



LEC-6020A



LEC-6020B



LEC-6020C



LEC-6020D

Overview

The LEC-6020 is a ruggedized, industrial-grade cyber security appliance designed to cope with challenging conditions at extreme temperatures. Featuring compact DIN Rail form factor and front facing I/O options, the fanless LEC-6020 is ideal for protecting networks in power utilities and other industrial infrastructures. It also functions as a gateway controller for data transmission between remote sites and control centers.

Features

Fanless, Compact and Robust DIN Rail Design

The lifespan of this IPC has been extended by removing the most easily damaged component, the fan. Also its compact and robust system design, including a DIN rail mount, can render your platform more space-saving and reliable.

Advanced Protection of Serial COM and Ethernet ports for harsh environments

LEC-6020 series have serial COM ports with advanced ESD protection and Ethernet ports with magnetic isolation protection to guarantee communication reliability in harsh industrial environments.

Lanner

Solid Expansion Capability

Complete storage expansion functionality, including CompactFlash and internal pin-header for VGA and console. LEC-6020A with an internal mini-PCIe slot for future expansion.

Wide Temperature

This product is ruggedized to support a wider temperature up to 70°C. Outfitted with industrial components (CF, memory) this platform can thrive in harsh conditions.

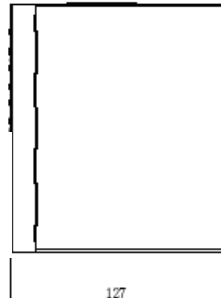
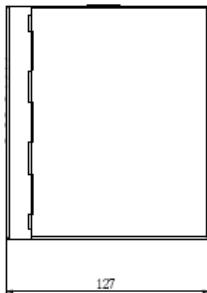
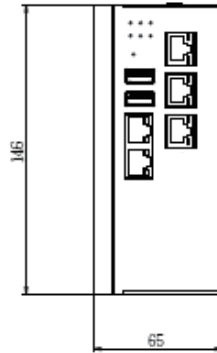
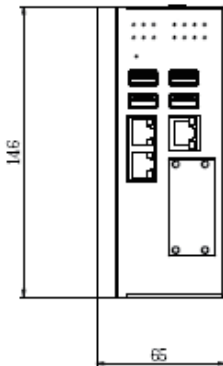
Flexible I/O Design

LEC-6020 series provides various I/O connectivity such as 3 or 5 GbE LAN, or 4 serial COM ports and 2 or 4 USB ports.

LAN Bypass

LEC-6020A/C/D supports 1 pair and LEC-6020B supports 2 pairs of Ethernet LAN Bypass function. Bypass ports allow users to have uninterrupted network traffic even if a single in-line appliance is shut down or is hung.

Dimensions: 65 x 146 x 127 mm (2.56" x 5.74" x 5")



LEC-6020A

LEC-6020B

Specifications

Processor Options		Intel® Atom™ N2600 1.6 GHz	
Chipset		Intel NM10	
BIOS		AMI 8Mbit SPI Flash ROM	
System Memory	Sockets	1 x 204-pin DDR3 SODIMM socket	
	Technology	DDR3 1066/1333MHz, unbuffered, Non-ECC	
	Max. Capacity	2 GB	
USB		LEC-6020A: USB 2.0 compliant hosts x 4, Type A connector. LEC-6020B/C/D: USB 2.0 compliant hosts x 2, Type A connector.	
Expansion Bus		Mini-PCIe (LEC-6020A)	
OS Support		LEC-6020A/B/D: Linux 2.6, Windows XP Embedded, Window XP, Window 7 Embdded LEC-6020C: Linux 2.6, Window 7 Embdded	
Storage	NAND Flash	None	
	HDD Support	SATA connector for SSD/HDD expansion, HDD mounting kits (by request)	
	Expansion	CompactFlash socket Type I/II x1	
Networking	LAN	LEC-6020A: 3 x 10/100/1000 Mbps ports, Autosensing, RJ45, with one pair of LAN bypass. LEC-6020B: 5 x 10/100/1000 Mbps ports, Autosensing, RJ45, with two pairs of LAN bypass. LEC-6020C: 5x10/100/1000Mbps ports, Autosensing, RJ45, with one pair of LAN bypass. 2x 1000 Mbps SFP ports	
		LEC-6020D: 5x10/100/1000Mbps ports, Autosensing, RJ45, with one pair of LAN bypass.	
		LEC-6020A: Intel 82574L x 3, LEC-6020B/6020D: Intel 82574L x 5 LEC-6020C: Intel i210 x 5, 82574L x 2	
	Magnetic Isolation Protection	1.5 KV built-in	
Serial Interface	Serial Standard	LEC-6020A: 2 x 10 pin terminal block for 4 x RS-232/422/485, 1 x internal header (RS-232 only) LEC-6020B: 1 x internal header (RS-232 only) LEC-6020C/D: 1 x DB9 for RS-232	
	ESD Protection	15 KV for all signals	
Serial Signals	RS-232	RTS, Rx, Tx, CTS, GND	
	RS-422	TxD+, TxD-, RxD-, RxD+, GND	
	RS-485	Data+, Data-, GND	
	Baudrate	Supports 50 bps to 115.2 kbps	
Display	Graphics Controller	Intel® GMA 3600	
	Display Interface	internal pinheader	
LEDs		LEC-6020A: Power, Storage, Run (user defined), 3 x User defined, 4 x Rx, 4 x Tx. LEC-6020B/D: Power, Storage, Run (user defined), 3 x User defined LEC-6020C: Power, Storage, Run(User defined), 3x User deined, 2x SFP	
Physical Characteristics	Housing	Steel, Aluminium	
	Weight	1 kg	
	Dimensions(WxHxD)	65 x 146 x 127 mm	
		Mounting Options	DIN rail and wall mount
Environment	Operating Temperature	-40~70°C	
	Storage Temperature	-40~85°C	
	Ambient Relative Humidity	5 to 95% (non-condensing)	
Power	Input Voltage	+12~36 V DC	
	Power Consumption	14.2 W (full run)	
	Connector	LEC-6020A: 2-pin terminal block, LEC-6020B/C/D: 6-pin terminal block	
Standard and Regulation	EMC	CE, FCC	
	Green product	RoHS	
Reliability	Alter tool	Built-in buzzer and RTC (real-time clock) with lithium battery backup	
	Automatic Reboot Trigger	Watchdog Timer 1~255 level time interval system reset, software programmable	
	Warranty	2 years	
	MTBF	54,251 Hrs (LEC-6020A, Power Adapter)	

Ordering Information

LEC-6020A	Intel Atom N2600 1.6 GHz CPU, 3 x Intel GbE w/ one bypass, 4 x RS-232/422/485 w/ ESD, Surge protection, 4 x USB, 1 x Mini-PCIe, +12~36 V DC w/ 2-Pin, DIN-Rail
LEC-6020B	Intel Atom N2600 1.6 GHz CPU, 5 x Intel GbE w/ two bypass, Dual +12~36 V DC w/ 6-Pin w/ power failure relay, DIN-Rail
LEC-6020C	Intel Atom N2600 1.6GHz CPU, 5 x Intel GbE w/ one bypass, 2 x Gigabit SFP, 1 x COM port, Dual +12~36 Vdc w/ 6-pin w/ power failure relay, DIN-Rail
LEC-6020D	Intel Atom N2600 1.6GHz CPU, 5 x Intel GbE w/ one bypass, 1 x COM port, Dual +12~36 Vdc w/ 6-pin w/ power failure relay, DIN-Rail