

# IFB125

Robust RISC-based DIN-rail Fanless Embedded System with i.MX 6UL Processor, COM, SPI, I<sup>2</sup>C, 2 LANs and DIO (2-in/1-out)

## Features

- RISC-based (i.MX 6ULtraLite) processor 528 MHz
- 256MB DDR3 SDRAM onboard
- 8GB eMMC flash onboard
- 1 SPI, 1 I<sup>2</sup>C
- 1 PCI Express Mini Card slot (Wi-Fi or 3G/4G)
- 2 digital inputs and 1 digital output
- Power input range of 9V to 48V DC with terminal block
- Embedded Linux operating system (Yocto)
- Fanless and compact design
- Wide operating temperature range from -40°C to +70°C



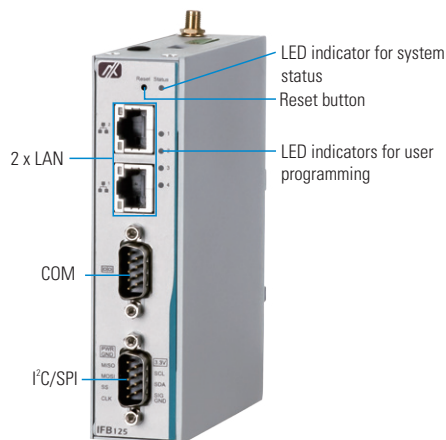
## Introduction

The IFB125 utilizes the low power RISC-based (i.MX6UL) processor and is designed to withstand temperatures ranging from -40°C to +70°C for using in extreme operating environment and industrial automation applications.

The IFB125 features one SPI, one I<sup>2</sup>C, one RS-232/422/485 serial port, dual LANs, two digital input channels, one digital output channel, LED for user programming and one eMMC onboard 8GB. Its vertical form factor makes it easy to install in a small cabinet. The ready-to-run IFB125 is specially designed for remote control/monitoring management applications like unmanned control room, industrial machine, automatic parking lot, traffic cabinet and more.

## Specifications

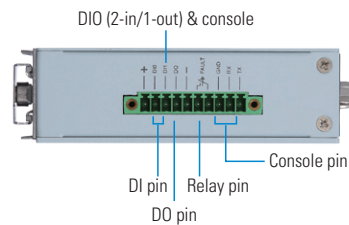
Construction	Extruded aluminum and heavy-duty steel, IP40	
CPU	NXP i.MX 6UL processor, ARM® Cortex®-A7 @ 528 MHz	
System Memory	1 x DDR3-1600 onboard, 256 MB	
System I/O Outlet	Serial Port	1 x RS-232/422/485
	LAN	2 x 10/100 Mbps Ethernet Magnetic isolation protection 1.5 KV
	SPI	Yes (DB9 connector) (with 3.3V @ 0.5A powered)
	I <sup>2</sup> C	Yes (DB9 connector) (with 3.3V @ 0.5A powered)
	Relay	1 x Relay
	USB	1 x USB 2.0
	DIO	1 x DIO (2-in/1-out) DI: wet/dry Digital input levels for wet contacts: -Logic level 0: Close to GND -Logic level 1: +0.7 to +30 V max. DO: wet Output channels: 1, sink type Output current: max. 200 mA per channel On-state voltage: 24 VDC nominal, open
	Console Port	Yes For user setting with debug
	EEPROM	1 x EEPROM (2 Kb)
	Wireless	1 x PCI Express Mini Card slot (USB signal only) 1 x SIM card socket



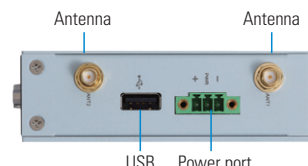
▲ Front view



▲ Rear view



▲ Bottom view



▲ Top view

Watchdog Timer	WDT 1: 0.5 to 128 sec. with a time resolution of 0.5 sec.
LEDs	1 x LED for power status 1 x LED for reset status 4 x LED (programming by client)
Storage	1 x eMMC 8GB flash onboard
Power Supply	9 to 48 VDC power input range
Operating Temperature	-40°C to +70°C (-40°F to +158°F)
Storage Temperature	-45°C to +85°C (-49°F to +185°F)
Humidity	10% to 95%
Vibration Endurance	5 Gms @ (10 to 150Hz random; operation)
Dimensions	31 mm (1.22") (W) x 100 mm (3.94") (D) x 125 mm (4.92") (H)
Weight (net/gross)	0.3 kg (0.66 lb)/0.44 kg (0.97 lb)
Installation	DIN-rail, wall mount
OS Linux	Toolchain/Cross compiler: Yocto Kernel: 3.14.52 (with NXP and Axiomtek hardware modified patch)
Certifications	FCC part 15, Heavy Industrial CE

## Ordering Information

### Standard

IFB125-FL-DC (P/N: E26V125100)	Robust DIN-rail fanless embedded system with i.MX 6UL processor, SPI, I <sup>2</sup> C, COM, 2 LANs and DIO (2-in/1-out) (-40°C to +70°C)
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### Optional

Wall mount kit Wireless (3G/GPS or Wi-Fi) module
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## Packing list

- 1 x CD
- 4 x Screws
- 1 x Din-rail kit
- 1 x Console cable
- 1 x 3-pin terminal block for power port
- 1 x 10-pin terminal block for DIO port

\* Specifications and certifications may vary based on different requirements.

## Dimensions

