



Robust RISC-based DIN-rail Fanless Embedded System with i.MX 6UL Processor, COM, LAN, DIO (2-in/2-out) and 2 Mini Card Slots

# **Features**

- RISC-based (i.MX 6UltraLite) processor 528 MHz
- 512MB DDR3 SDRAM onboard
- 8GB eMMC flash onboard
- 2 Mini Card slots (Wi-Fi, 3G/4G or LoRa)
- 9 ~ 48 VDC wide range power input with terminal block
- Embedded Linux operating system (Yocto)
- Wide operating temperature range from -40°C to +70°C











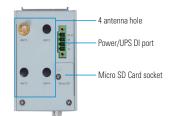


### Introduction

The IRU131 DIN-rail fanless embedded system utilizes a low power RISC based (i.MX6 UL) processor and is designed to withstand temperatures ranging from -40°C to +70°C for applications in extreme operating environment and industrial automation.

The IRU131 supports one RS-232/422/485 serial ports, one LAN port, two digital input channels, two digital output channels and two wireless sockets. Its vertical DIN-rail form factor makes it easy to install the system in a small cabinet. The ready-to-run IRU131 is specially designed for remote control/ monitoring management applications ideal in a unmanned control room, an industrial machine, an automatic parking lot, a traffic cabinet, just to name a few.





### **Specifications**

Construction	Extruded alumi	num and heavy-duty steel, IP40		
CPU	NXP i.MX 6 UL p	NXP i.MX 6 UL processor, ARM® Cortex®-A7 @ 528 MHz		
System Memory	1 x DDR3-1600	1 x DDR3-1600 onboard, 512 MB		
System I/O Outlet	Serial Port	1 x RS-232/422/485		
		Magnetic isolation protection 2KV		
	LAN	1 x 10/100 Mbps Ethernet		
		Magnetic isolation protection 1.5KV		
	USB	1 x USB 2.0		
	DIO	1 x DIO (2-in/2-out) with isolation 2KV		
		Di: Wet/Dry		
		D0 : Wet		
		DI:		
		Input channels: 2 source type		
		Input voltage: 0 to 30 VDC digital input		
		levels for dry contacts:		
		-Logic level 0: close to GND		
		-Logic level 1: open		
		Digital input levels for wet contacts:		
		-Logic level 0: +10V to +24V (DI to COM-)		
		-Logic level 1: +3V max.		
		D0:		
		Output channels: 2, sink type		
		Output current: max. 200 mA per		
		channel		
		On-state voltage: 24VDC nominal, open collector to 30V		
		Optical isolation protection 2 KV		

System I/O Outlet	Console Port	Yes	
		For user setting with debug	
	EEPROM	1 x EEPPROM (2 Kb)	
	Device ID	ID setting 0 ~ 255	
	Wireless	2 x Mini Card slot	
		1 x SIM Card socket	
Watchdog Timer	WDT 1: 0.5 to 128 se	c. with a time resolution of 0.5 sec.	
RTC	Yes ( RTC battery on board)		
LEDs	2 x LED for dual wireless status		
	2 x LED for DI status		
	2 x LED for DO statu	S	
Storage	1 x eMMC 8GB flash onboard		
Power Supply	9 ~ 48 VDC power input range		
Operating Temperature	-40°C ~ +70°C (-40°F ~ +158°F)		
Storage Temperature	-45°C ~ +85°C (-49°F ~ +185°F)		
Humidity	10% ~ 95%		
Vibration Endurance	2 Gms @ (10 ~ 150H	Iz sine wave; operation)	
Dimensions	55 mm (2.16") (W) x 82 (3.23") mm (D) x 108 (4.25") (H)		
Weight (net/gross)	0.3 kg (0.66 lb)/0.50	kg (1.10 lb)	
Installation	DIN-rail		
Certificate	FCC Part 15		
	Heavy Industrial CE		

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<sup>\*</sup> All specifications and photos are subject to change without notice



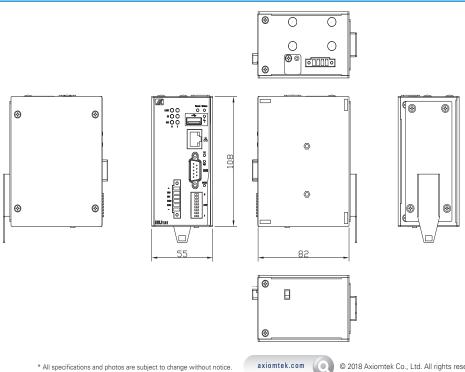
## **Ordering Information**

Standard	
IRU131-FL-DC	Robust DIN-rail fanless embedded system with i.MX 6UL processor, COM, LAN, DIO (2-in/2-out) and 2 Mini Card slots (-40°C ~ +70°C)

#### Optional

Wireless (3G/GPS or Wi-Fi) module

**Dimensions** 



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