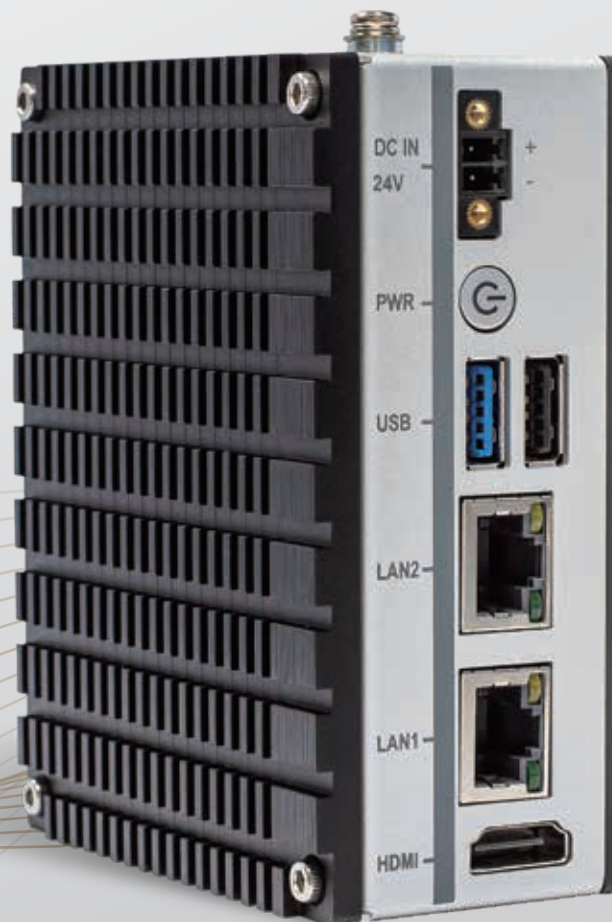


IDEABOX Plus series

Compact PAC

IBX-121

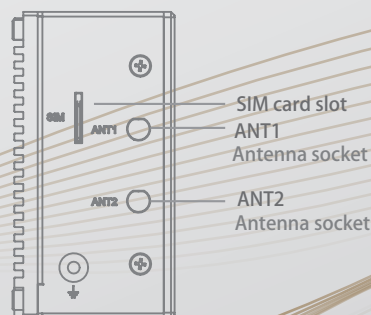
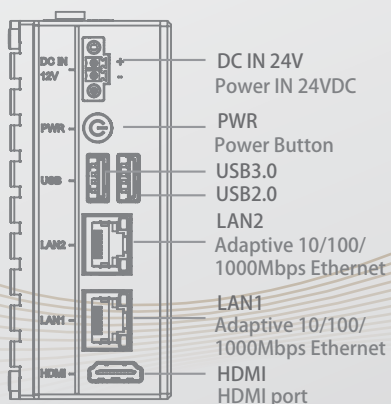


IBX-121 controller supports 16 axes synchronous motion control and integrates ARM 4-core processor that supports multi-core real-time control. It has built in communication protocols such as EtherCAT, Modbus TCP, and OPC UA. IBX-121 controller supports multi-axis synchronous motion control and integrates ARM 4-core processor that supports multi-core real-time control. It has built in communication protocols such as EtherCAT, Modbus TCP, and OPC UA.

The IBX121 series controller is based on the IEC61131-3 programming standard and supports PLCopen Motion Control Part1, Part2 and Part4. It can support custom process modules and is expandable with wireless interfaces, including WIFI 802.11 and 4G LTE. Its compact, fanless design makes it easy to install and suitable for use in harsh conditions.

IBX-121

Features



Great Motion Control Capability

- Synchronous motion control up to 16 axes;
- Minimum cycle time 1ms ;
- Support multi-axis interpolation motion, point-to-point motion, Jog motion, Gear/CAM motion;

Various Fieldbus Interfaces

- Support Modbus TCP, Ethernet, Ethernet/IP, EtherCAT

Data Protection

- Power failure protection (Optional)

Easy to Adjust

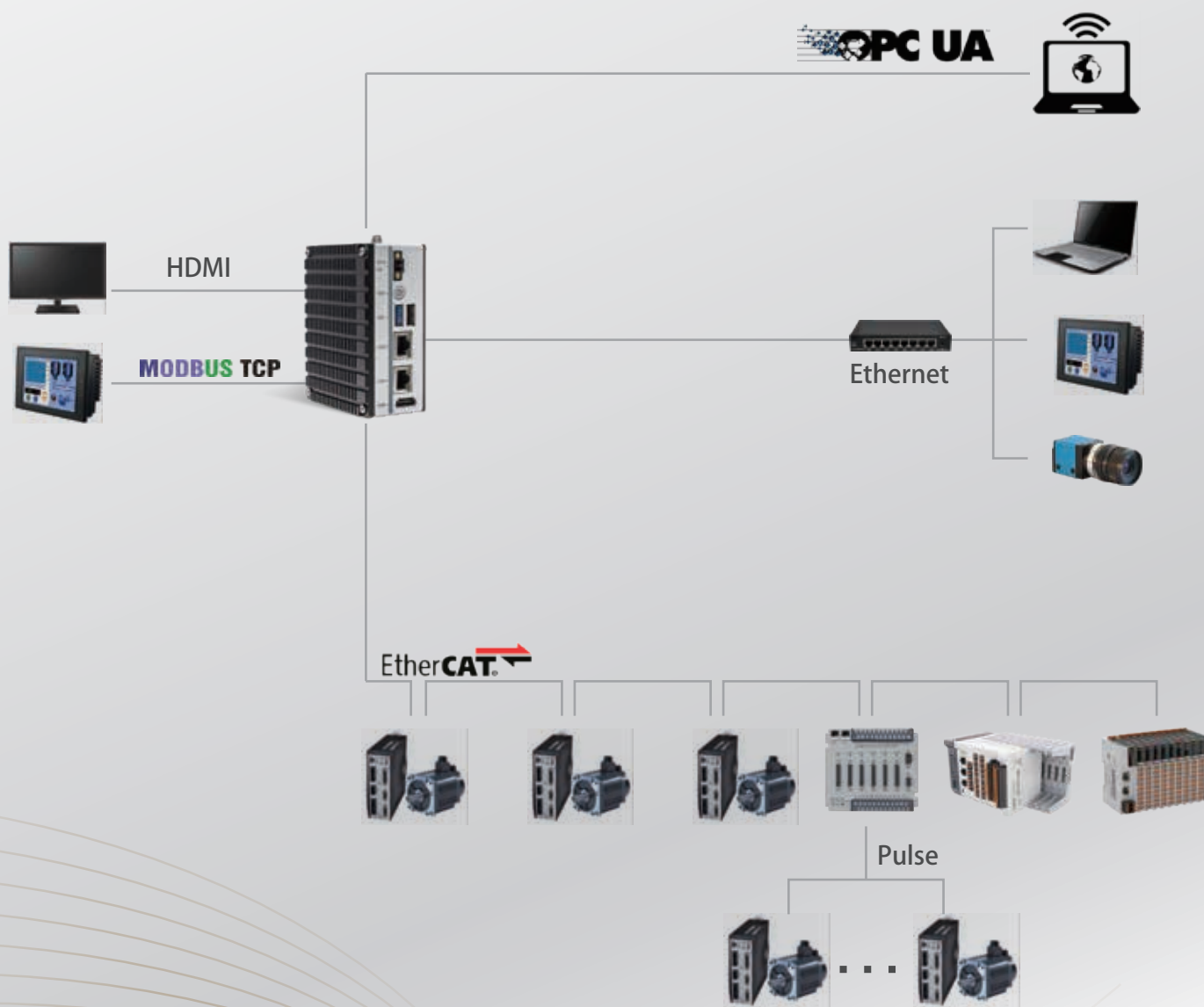
- The development platform fully supports IEC61131-3 standard based OtoStudio V3 programming environment;
- Support remote diagnostic services

Property Protection

- Encryption chip design for user software protection and end user payment control (Optional)

IBX-121 System Architecture

The IBX-121 series motion controller is suitable for long-term operation in harsh industrial environments. It can be widely used in financial equipment terminals, self-service kiosks, subway ticketing and gate systems, onboard terminals, intelligent transportation, machine vision, medical devices, and factory automation, among other applications.



IBX121 series	Order Number	Description
	IBX121-604-16EC	2 * Ethernet (1000Mbps) , 2 * USB, EtherCAT16 axes synchronous motion control ; HDMI display port
	IBX121-604-32EC	2 * Ethernet (1000Mbps) , 2 * USB, EtherCAT32 axes synchronous motion control ; HDMI display port

IBX-121 Specification



Processor	Soc CPU	RockChip RK3568 4-core 64bit Cortex-A55 processor, 2.0GHz
RAM	Technology Max. Capability	Support DDR3L 1333 MHz 1 * SO-DIMM slot, max. capability 8GB (optional)
Display	HDMI	1 * HDMI, maximum 4096×2160 @ 60Hz
Network	Controller Connector (RJ45)	I211AT 2 * 10/100/1000 Mbps
I/O Interface	SPI SIM card USB	Support Support 1 * USB3.0+1 * USB2.0
External Interface	Mini PCI-E TTL/GPIO PCIE/TPM	USB2.0, support 4G, with 1 * nano-SIM card slot 6*TTL+16*GPIO+1*USB2.0+SW signal+Power LED signal+RST signal+3.3V/5V 2*PCIE1X+TPM+SATA+HDD LED signal+3.3V/5V/12V
Memory	M.2	M.2 2242 SATA
Software Platform	Microsoft Windows Linux	Windows 7/8/10 Linux
Power Supply	Input Voltage	24V DC (with overcurrent, overvoltage and reverse-plug protection)
Power Consumption	Typical (idle) Maximum (full load)	10W 25W
Structure	Surface Mount Dimension (WxHxD)	Aluminum case DIN rail/wall mount 105×85×41.5mm
Environment	Storage Temperature Storage Relative Humidity Vibration	0 ~ 60° C -40 ~ 85° C (-40 ~ 185° F) 95% @ 40° C (non-condensing) With SSD : 3 Grms, IEC60068-2-64, random, 5~500 Hz, 1h/axis (lift) With SSD : 30 G, IEC-60068-2-27, non-chordal, 11 ms lasting (lift)
Certification		ITS CE Certificate、100% Chinese Domesitc Certificate