

- ◆ Built-in TI ARM Cortex-A8 Processor up to 1GHz
- ◆ 1 x RJ-45 for 10/100M Ethernet
- ◆ 3 x RS-485
- ◆ 1 x HDMI (Micro HDMI)
- ◆ 1 \* USB 2.0 Host (Type A)

- ◆ Built-in 512M RAM
- ◆ Built-in 8GB eMMC
- ◆ Wide operating temperature  $-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$
- ◆ Wide range DC input from 24V ~ 36V

## Product Overview

The A-9N provided by Yottacontrol is a Fanless Edge Computing Controller for Ethernet and serial port. Compared with traditional Industrial controllers, various interfaces help mutual data exchange, and shared program support various industrial projects.

The A-9N can be used for Ethernet data transmission and other functions through its third party 4G / 5G communication module. With the third party GPS function, the A-9N can also be used as a GPS tracking system for vehicle management or maritime system. It can be used in M2M application to transmit remote I/O, Modbus data or camera video.

Within the high-performance CPU, the A-9N can process large amounts of data and is suitable for harsh industrial environments.

## Specifications

### CPU

- ◆ TI Cortex-A8 ARM

### Memory

- ◆ DDR3 512MB onboard

### Storage

- ◆ eMMC 8GB onboard

### Expansion

- ◆ 1 x USB 2.0 Host for Wi-Fi module / USB-HUB / KEY-board ....

### I/O Interface-Front

- ◆ 1 x Power LED
- ◆ 1 x RJ-45 10/100M fast Ethernet with LED
- ◆ 1 x USB Host 2.0 type A
- ◆ 1 x Phoenix connector for power (24-36VDC)/GND/ignition input

### I/O Interface-Rear

- ◆ 1 x HDMI for 1920 x 1080@60Hz output
- ◆ 3 x RS-485

### Power Consumption

- ◆ Max 10W

### Power Management

- ◆ Auto Boot

### Operating System

- ◆ Linux (Debian 11.5)
- ◆ Built-in NODE-RED

### Dimensions

- ◆ 72mm (W) x 118mm (D) x 34mm (H)

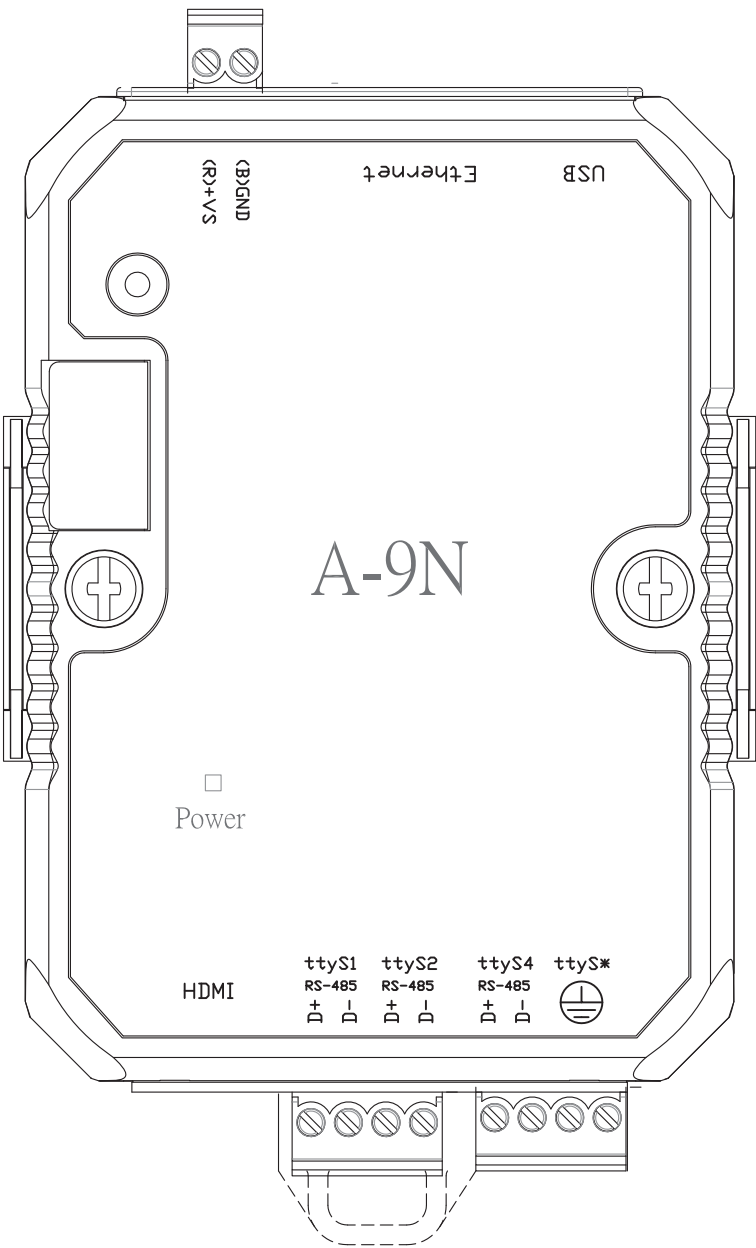
### Weight

- ◆ 0.2kg

### Environment

- ◆ Operating temperatures:  $-10^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$
- ◆ Storage temperatures:  $-20^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- ◆ Relative humidity: 90% (non-condensing)

Dimension Drawing

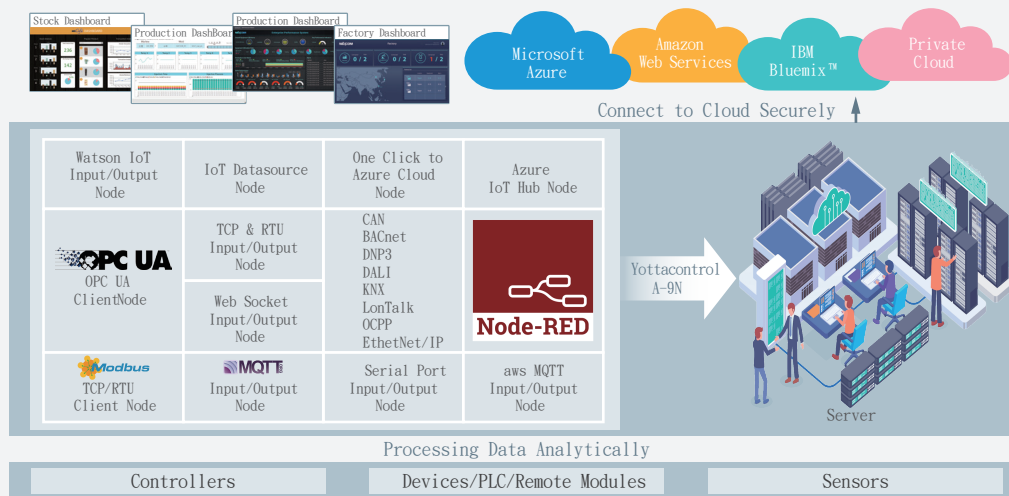


Ordering Information

- A-9N (P/N: YIPCA9N)

# A-9N Application

Fanless Edge Computing Controller



## Main Features

- Ready-to-use IoT gateway to accelerate IoT project deployment
- Open architecture support both ARM-based IoT gateway
- One-click deployment to cloud
- Cloud SCADA presentation
- Real-time information response
- Support Modbus, OPC-UA, MQTT, SQL, BACNET.....

## Available Apps (More than 7000+ Apps)

802.1X Authenticator	NAT	Protocol MODBUS-TCP2RTU	CAN
AT Modem Emulator	NetFlow/IPFIX	Protocol NHRP	DALI
Azure IoT SDK Python3 API Version 2	NMAP	Protocol OSPF	LonTalk
Backup APN	Node-RED	Protocol PIM-SM	OpenAI
Band Select	Node-RED AWS Node	Protocol RIP	ngsi
Bluetooth	Node-RED Azure Node	Python	Whatsapp-link
Bondix S. A. NE Enterprise	Node-RED Bluetooth Node	Python3	GS1
Captive Portal	Node-RED Dashboard	Python3 with pip	Line-api
Cumulocity	Node-RED dnp3 Node	Samba	Skype-api
CURL	Node-RED Filesystem Node	Scalable AI Manager	google-apis
Customer Logo	Node-RED FTP Node	SCEP Client	text2speech
Daily Reboot	Node-RED GPSd Node	Secure Syslog	paypal
DHCP based on MAC OUI	Node-RED gzip Node	SendReport	shopify
DHCP Relay (over IPsec)	Node-RED KNX Node	Serial to network proxy	sony-audio
DNP3 Outstation	Node-RED LwM2M Node	Serial2TCP	visa-api
Docker	Node-RED Modbus Node	Service Access Limitation	ebay-api
EasyVPN Client	Node-RED OPC UA Node	Sleep Mode	Rest-API
Ethernet Mirroring	Node-RED PLC EtherNet/IP Node	SSHClient	line-pay
Ethernet Port Detector	Node-RED PLC Melsec Node	Stunnel	web-push
Event Notificator	Node-RED Splunk Node	TCP SYN Keep-Alive	zapier
Ext4_tools	Node.js	Technical Report 069 (TR-069)	pdf-to-png
File Uploader	npm	Transparent mode	ui-webcam
FOTA	NTP	UDP Communication Watchdog	pdf-red
FRR	NTRIP Client	URL Blocker	usb-camera
GDB (GNU Debugger)	OpenVPN Custom Config	USB over IP (Electronic Team)	line-image-api
GPS	Operating Hours Counter	USR LED Management	QR-Code
HMPCClient	Packet Splitter	Vim	opencv
HTTPS Login Banner	PduSMS	WebAccess/VPN (VPN Portal)	PID-controller
L2TP Pseudowire	Pinger	Web Terminal	Mydb
Layer 2 Firewall (L2FW)	PLMN Whitelist	WebAccess/DMP Client	splite
Loopback	pppGateway	WiFi SSID Switch	mysql
LUA	Protocol ALPHA-MODBUS	WiFi STA Relay	ODBC
Midnight Commander	Protocol BGP	wM-BUS CONCENTRATOR	mongodb
Modbus logger	Protocol DF1-Ethernet	WoLGateway	.
Modbus to LwM2M	Protocol IEC101-104	XC-CNT FW update	.
Modbus to MQTT	Protocol IS-IS	Zabbix Agent	.
MQTT Broker	Protocol MODBUS-RTU2TCP	BACnet	.
MQTT Manager	Protocol MODBUS-RTUMAP	OCPP	.

www.yottacontrol.com

Fanless Edge Computing Controller

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