

# AIC

# 100



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Technology

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## Industrial-grade NXP i.MX6ULL Arm® Cortex®-A7 Processor Arm-based IoT Gateway



^ Energy Management



- Industrial-grade NXP i.MX6ULL Arm Cortex-A7 Processor
- 9V to 50V wide range DC Power Input
- Supports Node-RED browser-based flow editor
- 2 LAN, 1 USB 2.0, 2 COM RS-232/485
- 12-bit Isolated DIO (8 DI, 4 DO), 2 CAN Bus
- Mini PCIe with SIM socket for 4G/LTE/WiFi/BT/GPRS/UMTS
- Pre-installed with Debian Stretch R01
- Compact & Cableless design, Low Power Consumption

v Building Automation



^ Charging Station



arm



# Specifications

## System

Processor	NXP i.MX6 ULL 900MHz Arm® Cortex®-A7 Processor
Memory	1 DDR3L SDRAM, 512MB
Storage	AIC-100/110 : 1 NAND Flash, 512MB AIC-100A/110A : 1 eMMC, 32GB
EEPROM	1 EEPROM, up to 16KB
OS	Debian Stretch R01

## Ethernet

LAN 1	10/100 Mbps Ethernet, RJ45 Connector
LAN 2	10/100 Mbps Ethernet, RJ45 Connector

## Storage

SD	1 Micro SD Socket supports SDHC, up to 128GB (External)
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## I/O Interface

USB	1 USB 2.0 Type A
Serial	2 COM RS-232/485
Isolated DIO (AIC-110)	12 Isolated DIO : 8 DI, 4 DO
CAN Bus (AIC-110)	2 CAN Bus 2.0 A/B
Console	1 Micro USB
Button	- 1 User-define Button - 1 Reset Button
SIM	1 Nano SIM Card Socket
LED	Power, Ready, Serial, CAN, DIO
Antenna	3 Antenna for WiFi/4G/LTE/GPRS/UMTS/LoRaWAN

## Expansion

Mini PCIe	1 Full-size for USB/External SIM Card
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## Power

Power Input	DC 9V to 50V
Power Interface	3-pin Terminal Block : V+, V-, Frame Ground
Typical Consumption	12V DC @500mA

## Others

Watchdog Timer	Reset : 0.5 to 128 sec./min. per step
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## Software

Operating System	- Debian Stretch R01, Linux Kernel 4.9.11 - Supports bootup from SD Card/Nand Flash - Supports backup from SD Card - Filesystem : EXT4
Toolchain	gcc-linaro-6.3.1-2017.05-x86_64_arm-linux-gnueabi
Script Language	Python, NodeJS

## Mechanical

Dimensions	AIC-100/100A : 91mm x 91mm x 32mm (3.6" x 3.6" x 1.2") AIC-110/110A : 91mm x 91mm x 47mm (3.6" x 3.6" x 1.8")
Weight	0.4 kg (0.9 lb)
Mounting	- Wallmount by mounting bracket - DIN Rail Mount (Optional)

## Environment

Operating Temp.	-25°C to 70°C (-13°F to 158°F)
Storage Temp.	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, non-condensing
Relative Humidity	95% @70°C
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-64
EMC	CE, FCC, EN50155, EN50121-3-2

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# Order Information

Model Name	CPU	LAN	USB	Serial	SIM	CAN	Isolated DIO	Storage
AIC-100	Arm® Cortex®-A7	2	1	2	1	-	-	Flash
AIC-100A						-	-	eMMC
AIC-110						2	12	Flash
AIC-110A						2	12	eMMC

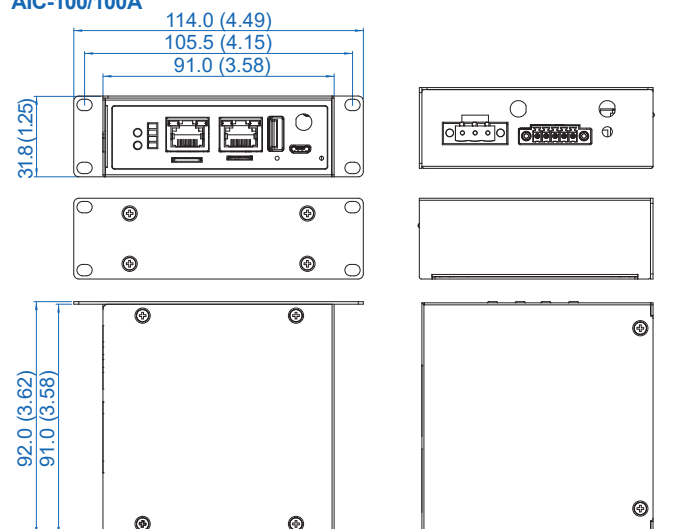
## Accessories

PWA-12W-US2	12W, 12V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block (US Type)
PWA-12W-EU	12W, 12V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block (EU Type)
PWA-18W-WT	18W, 12V, 85V AC to 264V AC Power Adaptor with 3-pin Terminal Block, Wide Temperature -30°C to +70°C
DIN-RAIL	DIN Rail Kit
TMK2-20P-100	Terminal Block 20-pin to Terminal Block 20-pin Cable, 100cm
TMK2-20P-500	Terminal Block 20-pin to Terminal Block 20-pin Cable, 500cm
TMB-TMBK-20P	Terminal Board with One 20-pin Terminal Block Connector and DIN-Rail Mounting
4G Module	Mini PCIe 4G/GPS Module with Antenna
WiFi & Bluetooth	WiFi & Bluetooth Module with Antenna
LoRaWAN Module	LoRaWAN Module with Antenna

# Dimensions & Drawing

Unit : mm (inch)

## AIC-100/100A



## AIC-110/110A

