

## Linux-ready Cortex-A7 Industrial IoT Gateway

# Matrix-702



### Features

- ATMEL Cortex-A5 ATSAM5D35 536MHz CPU, 512MB LPDDR2 SDRAM, 16GB eMMC
- Linux kernel 5.4.x with boot loader & file system, Toolchain: gcc 9.3.0 + glibc 2.31
- 1 x Gigabit Ethernet and 1 x 10/100Mbps Ethernet
- 1 x full size miniPCIe socket inside, 1 x Micro-SIM slot inside
- 2 x Antenna through SMA connector holes reserved
- 1 x microSD socket, support up to 128G storage capacity
- 1 x Serial console port (inside the box)
- Input Voltage: +9V~+48Vdc (terminal block)
- Real-time clock(RTC): Yes
- Watchdog: Yes
- Dimensions (W x H x D): 89 x 109.6 x 30mm (3.5 x 4.3 x 1.18in)
- Operating Temperature: 0~70°C (32~158°F)
- Regulation: CE Class A, FCC Class A

### ■ Ordering Information

#### Matrix-702

- Linux-ready Cortex-A5 536MHz Industrial IoT Gateway with 512MB SDRAM, 16GB eMMC Flash

## Linux-ready Cortex-A5 Surge-Protected Industrial IoT Gateway

# Matrix-704



### Features

- ATMEL Cortex-A5 ATSAM5D35 536MHz CPU
- Linux kernel 5.4.x with file system
- Toolchain gcc 9.30 + glibc 2.31
- 512MB LPDDR2 SDRAM, 16GB eMMC Flash
- Input Voltage: +9V~+48Vdc (terminal block)
- 1 x Gigabit Ethernet and 1 x 10/100Mbps Ethernet
- 1 x full size miniPCIe socket inside, 1 x Micro-SIM slot inside
- 2 x Antenna through SMA connector holes reserved
- 1 x Micro-SD card inside for data backup
- 4 x RS-485 serial ports with Surge protection  
Optional RS-485 with Isolation and Surge protection
- Real-time clock(RTC): Yes
- Watchdog: Yes
- Dimensions (W x H x D): 140 x 119.5 x 35.2mm (5.5 x 4.7 x 1.38in)

### ■ H/W Specifications

#### CPU / Memory

- CPU: ATMEL ATSAM5D35 536MHz w/MMU
- SDRAM: 512MB, LPDDR2
- Flash: 16GB, eMMC

#### Network Interface

- Type: 1 x Gigabit and 1 x 10/100Mbps Ethernet
- Protection: 1.5KV magnetic isolation
- Connector Type: RJ45

#### USB 2.0 Host Interface

- Host Ports: 1
- Supports 480Mbps hi-speed mode

#### Console / Debug Ports

- Support microUSB console port
- Serial console port (inside the box)

#### TTY (Serial) Port

- 4 x Surge-protected RS-485 (No isolation)
- Optional: 4 x Isolated / Surge-protected RS-485 (2500Vrms isolation)

- Direction Control: Auto, by hardware
- Connector: Terminal block

#### TTY (Serial) Port Parameters

- Baud Rate: Up to 921.6Kbps
- Parity: None, Even, Odd, Mark, Space
- Data Bits: 5, 6, 7, 8
- Stop Bits: 1, 1.5, 2
- Flow Control: RTS / CTS, XON / XOFF, None

### ■ Ordering Information

#### Matrix-704

- Linux-ready Cortex-A5 536 MHz Surge-protected Industrial IoT Gateway with four Surge-protected RS-485 serial ports

#### Matrix-704i

- Linux-ready Cortex-A5 536 MHz Industrial IoT Gateway with four Isolated / Surge-protected RS-485 serial ports



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