CATALOG JULY 2026



ATREYO®

SOLUTIONS THAT SIMPLIFY



INDUSTRIAL PRODUCTS

Atreyo – Solutions That Simplify

ABOUT ATREYO

Atreyo Research and Development Pvt. Ltd. designs and manufactures industrial IoT and embedded systems for automation, monitoring and control applications. Since 2016, we have been providing reliable products such as sensors, communication devices, display units and custom electronics for various industries.
With in-house R&D, firmware development and manufacturing, we ensure consistent quality and support. Our solutions are used in utilities, transportation, energy and infrastructure projects where reliability and long-term availability are important.

INDUSTRIAL PRODUCTS AND SOLUTIONS

We provide range of industrial computers, IoT gateways, interfaces and other industrial devices with software applications. At Atreyo, our industrial products are fortified with cutting-edge technology to withstand the most demanding environments. We prioritize durability by implementing optoisolation for serial interfaces and digital inputs in nearly all our products. Furthermore, our robust aluminum housings not only reinforce structural integrity but also facilitate effective cooling, ensuring superior performance and longevity.

INFRASTRUCTURAL PRODUCTS AND SOLUTIONS

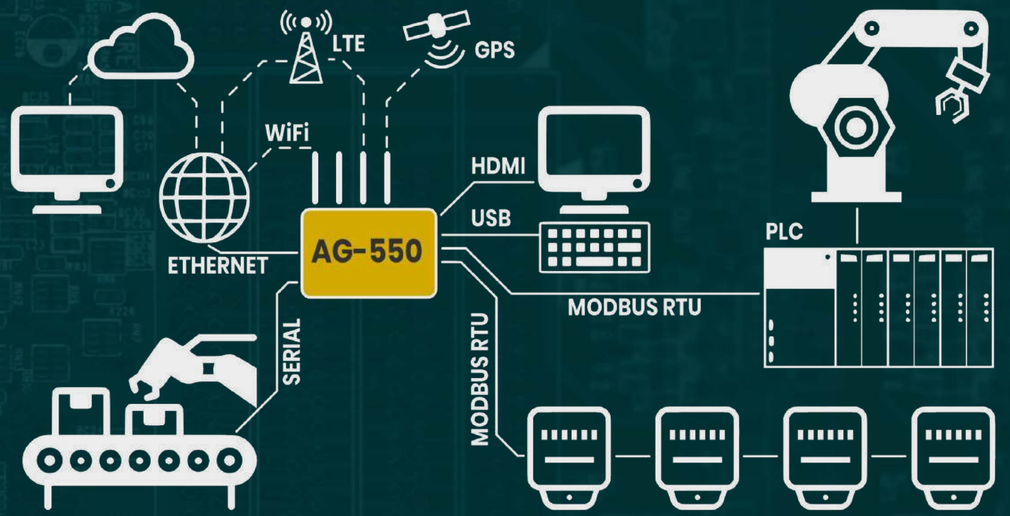
Our commitment to betterment shines through in every aspect of what we do. Our innovative solutions and products benefit a wide range of areas, including roads, trains, energy networks, street lights, farms, parking spots, buses, and more. From optimizing transportation networks and ensuring efficient energy distribution to enhancing street lighting, our innovations permeate urban living. We're making everything run smoother and safer.

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Industrial Computers

Industrial Computers
High capability IoT Gateways



FACTORY REMOTE AND LOCAL MONITORING

Our industrial computers seamlessly integrate the versatility of a Linux-powered computer with advanced communication interfaces, including LTE, GSM, and WiFi. What distinguishes our computers is their fanless design, ensuring uninterrupted, long-term performance. These cutting-edge computers are a perfect fit for a wide spectrum of applications. Whether functioning as robust machine controllers or high-performance IoT gateways for remote management and monitoring, our computers excel in numerous fields, including ATCS, ITMS, IIoT, and smart city projects.



AIC-550

Industrial Computer with 4G LTE, WiFi, SSD, CAN, RS485, Blutooth

Multipurpose industrial computer with inbuilt M.2 SSD storage for data. It is based on quad core ARM Cortex-A53 64bit processor. The computer is richly equipped with wireless interfaces. It has WiFi, 4G LTE, GPRS and Bluetooth. It also has three USB and two isolated RS485 ports. Dual gigabit Ethernet ensures fast communication with the server.

FEATURES

- Debian Linux OS
- 4G LTE, GSM, WiFi connectivity
- Inbuilt GNSS
- Two isolated RS485 ports
- CAN bus (depends on the model)
- Three USB ports (hosts) with one USB 3.0
- HDMI with 4k resolution support
- Fully programmable Linux environment

ADVANTAGES

- 64-bit processor
- The additional SSD as storage is ideal for various data-loggers or mutlimedia devices.
- Passively cooled and with a robust aluminium chassis
- Integration with Atra RMS and third party IoT platforms

SPECIFICATION

CPU	Quad core 64-bit ARM Cortex-A55 processor, 1.8GHz
Storage	16/32/64GB eMMC, internal SSD on M.2, microSD card
Memory	2/4/8GB RAM
Cellullar	4G LTE, GSM, 2 x nanoSIM (optional 5G)
Ethernet	2 x 10/100/1000 Ethernet port
GNSS	GPS, BDS, Galileo, GLONASS, QZSS
WiFi	802.11a/b/g/n/ac/ax (2.4GHz and 5GHz band optional)
Bluetooth	BT 5.2, 3Mbps, BR/EDR: 79 channels (optional)
Serial interface	2 x isolated RS485 (optional 1 x CAN and 1 x RS485)
Display	1 x HDMI 2.0 with 4K display support
Other	2 x USB 2.0 and 1 x USB 3.0
Status indicators	3 x RGB multifunction LED indicator
Power supply	8-57V DC with reverse polarity protection
Housing	Aluminium enclosure, fanless design

DOCUMENTATION

PRODUCT PAGE



AG-1629

Programmable IoT gateway with quad core ARM processor

Programmable industrial IoT Gateway working on Linux systems. It provides the ability to install custom scripts and use ready-made scripts. Under the control of the NodeRED it gives unlimited possibilities for easy creation of gateway operation logic. It also has 4G LTE cellular modem with support for 2 SIM cards. It has two LAN, to isolated RS485 interfaces and four opto-isolated I/Os.

FEATURES

- Debian Linux OS
- 4G LTE, GSM connectivity
- Inbuilt GNSS
- Two opto- isolated RS485 ports
- Two USB ports (hosts)
- Optional extensions cards like: WiFi, Bluetooth, etc.
- Optional isolated PoE power supply 37-57V
- Fully programmable Linux environment

ADVANTAGES

- Debian Linux OS
- Node-RED support.
- USB type-C port for system debug makes it easy to create your own applications
- External whatchdog with optional dual-source system boot option
- Watchdog has its own RTC
- Passively cooled small size robust aluminium chassis
- Integration with Atra RMS and third party IoT platforms

SPECIFICATION

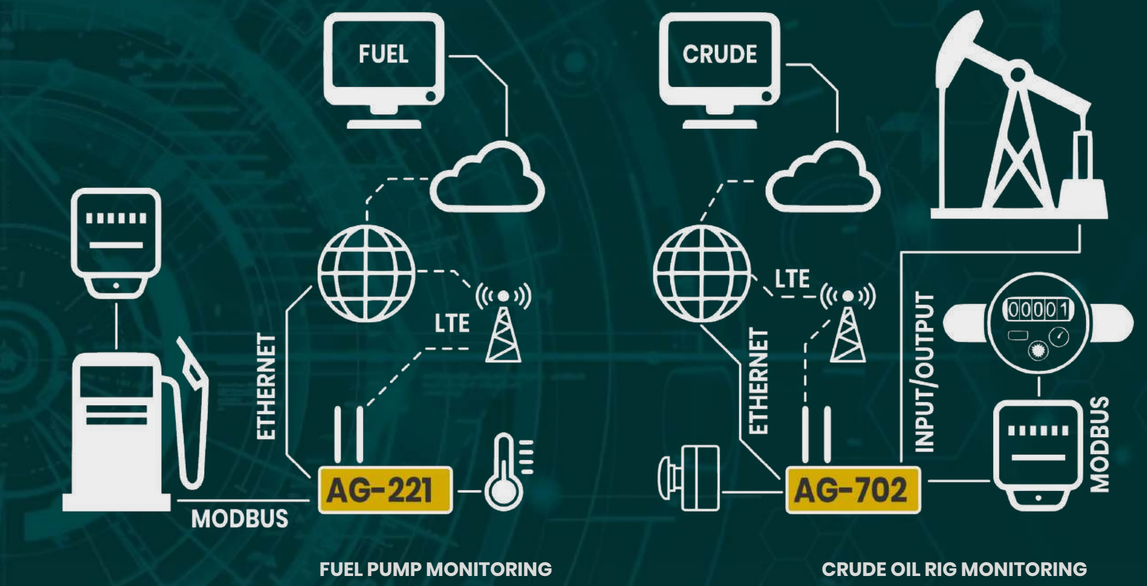
CPU	Quad core ARM Cortex-A7 processor, 512MB RAM
Storage	8/16/32/64 GB eMMC, up to 256GB microSD
Cellular	4G LTE, GSM (in GL model 3G also)
SIM	2 x nanoSIM, tray to prevent cards falling out
Ethernet	2 x 10/100 Ethernet port
GNSS	GPS, BDS, Galileo, GLONASS, QZSS
Serial interface	2 x opto-isolated RS485
Input/output	4 x opto-isolated digital input, 4 x digital output (interchangable with inputs)
Other	2 x USB host, 1 x USB type-C for debug, boot source selection switch
Status indicators	1 x activity (multicolor), 1 x cellular, 3 x user configurable
Power supply	8-48V DC with reverse polarity protection, PoE
Housing	Aluminium with DIN rail mounting option

DOCUMENTATION

PRODUCT PAGE

IoT Gateways

OpenWRT gateways
Real time OS gateways



The IoT gateway serves as a vital bridge, facilitating connections via interfaces like Modbus RTU, Modbus TCP/IP, RS232 and more. It seamlessly links devices such as PLCs, CNC machine tools, control panels, electrical panels, sensors and meters to a central server. This union empowers remote supervision and control, all fortified with robust security measures including VPN and SSL. At the heart of our IoT gateway lies the renowned OpenWRT system, known for its unwavering security and functionality. This choice provides the highest level of protection and operational excellence for critical systems. From power substations to city infrastructure, fuel pumps to crude oil systems, the IoT gateway stands as a safeguarding force, ensuring the secure and optimal performance of indispensable operations.



AG-702

Programmable OpenWRT LTE IoT gateway with RS485, RS232 and I/O

AG-702 is an innovative 4G LTE cellular Gateway with 2 ethernet ports, WiFi, RS485, RS232 and digital I/Os working on OpenWRT system. It can connect in multiple ways to the Internet with dual SIM capability and a range of advanced functions for mission critical IoT or M2M applications. AG-702 also support MQTT protocol for cloud application and Modbus TCP/IP or RTU for industrial applications.

FEATURES

- OpenWRT system
- Inbuilt website for configuration
- 4G LTE, GSM, WiFi connectivity
- Dual SIM card support
- Inbuilt GNSS
- Opto-isolated RS485 and RS232
- USB host with support of storage and additional serial converters
- LAN and WAN interfaces
- Advanced routing techniques and support for multiple VPNs
- 6000+ ready-to-use applications
- Fully programmable Linux environment

ADVANTAGES

- More RAM in this class of products
- Additional 512MB memory as overlay
- Opto-isolated serials and I/Os
- Native application for Modbus RTU/TCP gateway with MQTT, HTTP and TCP/IP
- Possibility to write your own applications and scripts
- Supports C, Python, Java, NodeJS, etc.
- LED indicator for cellular signal level
- Compatible with various industrial protocols
- Integration with Atra RMS and third party IoT platforms

SPECIFICATION

CPU	580Mhz MIPS24KEc processor
Storage	64MB+512MB ExtRoot support (overlay)
Memory	256MB RAM
Cellular	4G LTE, GSM (in GL model 3G also)
SIM	2 x nanoSIM, tray to prevent cards falling out
Ethernet	2 x 10/100 Ethernet WAN + LAN
GNSS	GPS, BDS, Galileo, GLONASS, QZSS
WiFi	IEEE 802.11b/g/n (AP and client)
Serial interface	1 x opto-isolated RS485, 1 x opto-isolated RS232
Input/output	2 x opto-isolated digital input, 1 x relay output
Other	1 x USB host with USB storage support
Power supply	8-48V DC, passive PoE
Housing	Aluminium with DIN rail mounting option

DOCUMENTATION

PRODUCT PAGE



AG-221

Programmable OpenWRT LTE IoT gateway with RS485 and digital inputs

AG-221 is an innovative RS485, 2 digital inputs and 4G LTE Cellular Gateway with Ethernet port and WiFi working on OpenWRT system. It can connect in multiple ways to the Internet with a range of advanced functions for mission critical IoT or M2M applications. AG-221 also support MQTT protocol for Cloud application and Modbus TCP/RTU for industrial applications.

FEATURES

- OpenWRT system
- Inbuilt website for configuration
- 4G LTE, GSM, WiFi connectivity
- Inbuilt GNSS
- RS485 with Modbus support
- Advanced routing techniques and support for multiple VPNs
- 6000+ ready-to-use applications
- Fully programmable Linux environment

ADVANTAGES

- More RAM in this class of products
- Additional 512MB memory as overlay
- Opto-isolated digital inputs
- Native application for Modbus RTU/TCP gateway with MQTT, HTTP and TCP/IP
- Possibility to write your own applications and scripts
- Supports C, Python, Java, NodeJS, etc.
- Compatible with various industrial protocols
- Integration with Atra RMS and third party IoT platforms

SPECIFICATION

CPU	580Mhz MIPS24KEc processor
Storage	64MB+512MB ExtRoot support (overlay)
Memory	256MB RAM
Cellular	4G LTE, GSM (in GL model 3G also)
SIM	2 x nanoSIM
Ethernet	2 x 10/100 Ethernet
GNSS	GPS, BDS, Galileo, GLONASS, QZSS
WiFi	IEEE 802.11b/g/n (AP and client)
Serial interface	1 x isolated RS485
Input/output	2 x opto-isolated digital input
Power supply	8-48V DC, passive PoE
Housing	Aluminium with DIN rail mounting option

DOCUMENTATION

PRODUCT PAGE



AG-743

4G LTE 4 ethernet industrial router with RS485 and I/O

AG-743 is a 4G LTE cellular router/gateway with 4 ethernet ports, WiFi, RS485 and digital inputs working on OpenWRT system. It can connect in multiple ways to the internet with dual SIM capability and a range of advanced functions for mission critical IoT or M2M applications. AG-743 also support MQTT protocol for cloud application and Modbus TCP/IP or RTU for industrial applications.

FEATURES

- OpenWRT system
- 1 WAN and 3 LAN ports
- Inbuilt website for configuration
- 4G LTE, GSM, WiFi connectivity
- Dual SIM card support
- Inbuilt GNSS
- Opto-isolated RS485
- USB host with support of storage and additional serial converters
- Advanced routing techniques and support for multiple VPNs
- 6000+ ready-to-use applications
- Fully programmable Linux environment

ADVANTAGES

- More RAM in this class of products
- Additional 512MB memory as overlay
- Opto-isolated serials and I/Os
- Native application for Modbus RTU/TCP gateway with MQTT, HTTP and TCP/IP
- Possibility to write your own applications and scripts
- Supports C, Python, Java, NodeJS, etc.
- Compatible with various industrial protocols
- Integration with Atra RMS and third party IoT platforms

SPECIFICATION

CPU	580Mhz MIPS24KEc processor
Storage	64MB+512MB ExtRoot support (overlay)
Memory	256MB RAM
Cellular	4G LTE, GSM (in GL model 3G also)
SIM	2 x nanoSIM, tray to prevent cards falling out
Ethernet	4 x 10/100 Ethernet - 1 x WAN + 3 x LAN
GNSS	GPS, BDS, Galileo, GLONASS, QZSS
WiFi	IEEE 802.11b/g/n (AP and client)
Serial interface	1 x opto-isolated RS485, 1 x opto-isolated RS232
Input/output	1 x opto-isolated digital input, 1 x opto-mosfet output
Other	1 x USB host with USB storage support
Power supply	8-48V DC, passive PoE
Housing	Aluminium with DIN rail mounting option

DOCUMENTATION

PRODUCT PAGE



AG-201

Basic Modbus RTU gateway

Basic Modbus RTU Gateway for users seeking 4G LTE connectivity for their custom applications. This gateway features both RS485 and LTE/GPRS communication capabilities, complete with SMS support. AG-201 ensures bidirectional connectivity, enabling Modbus RTU data exchange with the cloud via MQTT.

FEATURES

- Modbus RTU support
- Direct send data from Modbus to MQTT
- 4G LTE and GSM connectivity
- RS485
- Security settings for configuration access
- Works with most MQTT servers

ADVANTAGES

- Easy to config by dedicated computer application
- Convenient configuration of even a large number of gateways for a large project
- Full MQTT support for communication with the cloud server
- Save the configuration on your computer so that it can be uploaded to other gateways during mass configuration

SPECIFICATION

CPU	ARM processor 500MHz
Memory	16MB RAM
Cellular	4G LTE, GSM
SIM	1 x microSIM
Antenna connector	1 x SMA for cellular, 1 x SMA for GNSS (optional)
Serial interface	1 x RS485
Other	USB for system update
Status indicators	1 x activity, 1 x power, 1 x LTE
Power supply	8-36V DC with reverse polarity protection
Housing	Aluminium with DIN rail mounting option

DOCUMENTATION

PRODUCT PAGE



AG-1115

Customisable IoT gateway

AG-1115 offers an exceptional platform for customization, catering to users in search of a dedicated 4G LTE gateway solution for their unique applications. This gateway showcases a versatile array of features, including opto-isolated RS485, digital inputs and outputs, one analog input, and seamless 4G LTE/GPRS communication with SMS support.

FEATURES

- 4G LTE, GSM connectivity
- Dual SIM support
- 2 independent NO relay outputs
- Opto-isolated RS485
- 4 opto-isolated digital inputs
- Analogue input
- GNSS for accurate time and location
- Battery/superCAP backup option
- Indicators and SIM accessible from the front
- Aluminium compact size casing
- Panel mounting

ADVANTAGES

- Dual SIM, dual stand-by
- Battery backup for up to 3 days or super CAP backup option
- The gateway is customised according to customer requirements and can have many functionalities
- All indicators are on the front panel. Also USB port for configuration and SIM card. Through which it can be panel-mounted.

SPECIFICATION

CPU	ARM processor 500MHz
Memory	16MB RAM
Cellular	4G LTE, GSM with 2 SIM card support
GNSS	GPS, BDS, Galileo, GLONASS, QZSS
Serial interface	1 x opto-isolated RS485
Input/output	4 x isolated digital Input, 1 x 230V sensing digital input, 1 x analog input, 2 x relay digital output
Status indicators	5 x digital input, 1 x activity, 1 x power, 2 x output, 1 x LTE, 1 x antive antenna enable
Power supply	8-36V DC with reverse polarity protection
Power backup	SuperCAP backup for last message or long time battery backup (depend on customer requirement)
Housing	Aluminium with panel mounting option

DOCUMENTATION

PRODUCT PAGE



AG-831

CCMS gateway with Modbus, timer and I/O

This gateway interfaces with servers via 4G LTE or GSM, ensuring reliable data exchange. It features a built-in timer with 10 ON/OFF schedules in a 24-hour cycle and an auto-configurable astronomical timer using precise location data. With a Modbus RTU interface, it communicates with various devices like energy meters, PLCs and other Modbus-compatible equipment.

FEATURES

- 4G LTE, GSM connectivity
- 3 independent relay outputs
- 3 independent NO relay outputs controlled by hourly and solar timer.
- Opto-isolated RS485 for Modbus RTU
- 2 opto-isolated digital inputs
- Astronomical timer
- GNSS for accurate time and location
- Internal website for configuration
- Aluminium compact size casing
- DIN rail mounting

ADVANTAGES

- Possibility to operate autonomously or be controlled from a server
- Possibility of controlling the outputs via SMS from an authorised telephone number
- Can be configured by web interface, from a server and via SMS
- List of up to 10 authorised telephone numbers
- Alarm SMS after a change in the status of inputs
- Remote reading of input status and configuration
- Possibility not only of reading but also of controlling devices via Modbus
- Firmware update via USB stick or from server
- Sending the last message after a power failure (optional)

SPECIFICATION

CPU	ARM Cortex-M4
Cellular	4G LTE, GSM
GNSS	GPS, BDS, Galileo, GLONASS, QZSS
Serial interface	1 x opto-isolated RS485
Ethernet	1 x 10/100 Ethernet port (for configuration)
Inputs	2 x isolated digital input,
Outputs	3 x independent relay digital output
Status indicators	2 x RS485, 2 x digital input, 1 x activity, 1 x power, 3 x output, 1 x cellular
Power supply	8-36V DC with reverse polarity protection
Power backup	SuperCAP backup for last message (optional)
Housing	Aluminium with DIN rail mounting option

DOCUMENTATION

PRODUCT PAGE

LoRaWAN® Gateways

LoRaWAN® gateways for industry and infrastructure



LORA GATEWAY WORKING EXAMPLE

LoRaWAN® stands as a modern wireless communication system, featuring an impressive combination of long-range transmission and low power consumption. The combination of this two is a highly appealing solution for various sectors, including the IoT and IIoT industries, as well as applications like smart lighting and water management. At the heart of this ecosystem, LoRaWAN® gateways play a pivotal role. They serve as an essential link between nodes and the broader network. Subsequently, they seamlessly relay this data to a web server, either over the internet or through a private network infrastructure.



ALWG-1638

Multi-channel LoRaWAN® gateway

Multichannel LoRaWAN® gateway, powered by ARM Cortex-A7 processor with an IP67 enclosure to handle tough environments. Standout features include an isolated power supply for protection and power backup. The gateway's dual SIMs ensures network connectivity redundancy. Moreover, its multiple VPN support adds an extra layer of security, serving to diverse communication needs.

FEATURES

- Multi-channel LoRaWAN®
- 4G LTE, GSM, Ethernet connectivity
- Two SIM cards for reliable communication
- Aluminium housing resistant to all weather conditions
- External RF antenna with high gain
- Possibility to send messages after a power failure
- GNSS for accurate time and location
- OpenWRT system with custom application support
- Internal website for configuration

ADVANTAGES

- Built-in Chirpstack LNS server
- Installed NodeRED working with Chirpstack
- Possibility of connecting the gateway via VPN to the server
- Saving and uploading configurations
- Sending the last message after a power failure
- Integration with Atra RMS and third party IoT platforms

SPECIFICATION

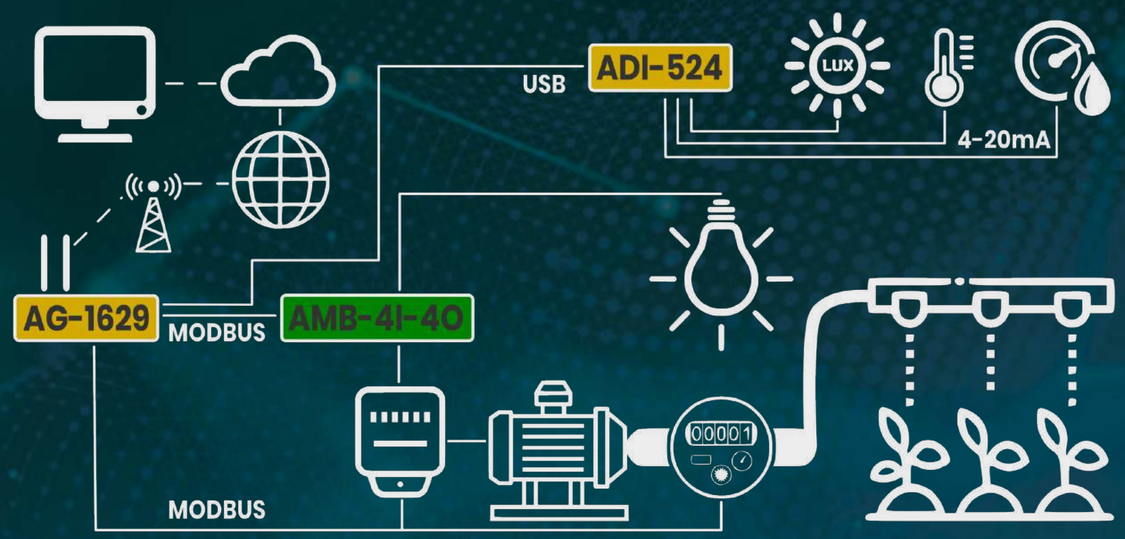
CPU	Quad core ARM Cortex-A7 processor
LoRaWAN®	LoRaWAN® Class A/B/C, 8 x 8 channels LoRa packet detectors
Cellular	4G LTE, GSM (in GL model also 3G)
SIM	2 x nanoSIM, tray to prevent cards falling out
Antenna	High gain fiber antenna for LoRa Cellular, GNSS, WiFi antennas within enclosure
Ethernet	1 x 10/100 Ethernet port
GNSS	BeiDou, Galileo, GLONASS, GPS, QZSS
WiFi	IEEE 802.11b/g/n (optional)
Status indicators	1 x RGB LED for indicate all functions
Other interfaces	1 x USB for debug (type-C)
Power supply	37-57V DC by isolated EEE802.3at compliant PoE
Housing	IP67 aluminium housing resistant to all weather conditions

DOCUMENTATION

PRODUCT PAGE

Data Interfaces & I/O Expanders

4-20mA industrial interfaces
I/O expanders
Serial converters



PLANT IRRIGATION AND LIGHTING SYSTEM

Data interfaces are used in order to assure data transfer and convert an incompatible interface into one that is compatible with the rest of the industrial system. We provide interfaces like USB to RS232, 4-20 mA and others.
I/O expanders are devices that enhance the number of inputs and outputs in a computer, gateway, industrial controller or PLC so that it can operate more peripherals as the system requires.



ADI-524

Four channel 4-20mA isolated converter to Modbus

Four-channel optically isolated converter of analogue 4-20mA signals to Modbus RTU interface, equipped with 24-bit delta-sigma ADC converters. It also features a USB port and an additional 24V isolated power supply for 4-20mA devices. USB port make this device perfect to use with industrial computers and gateways with USB port.

FEATURES

- 24 bits Sigma Delta ADC converters
- Isolation between the 4-20mA sectionand the rest circuit
- RS485 and USB for connecting to host
- Data reading from each channel 200ms
- Aluminium compact size casing
- 24V isolated supply on isolated side
- DIN rail mounting

ADVANTAGES

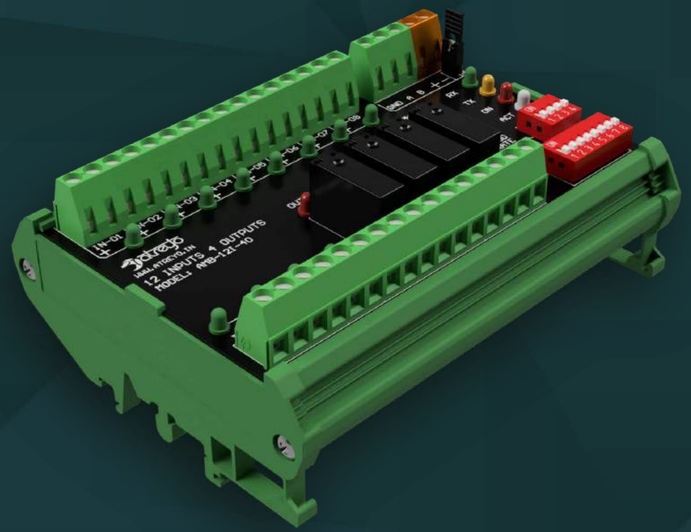
- Can be connected via USB so can be used with computers without RS485
- Fast reading of input signals because they are not multiplexed
- Protection of inputs against high surges with GDT

SPECIFICATION

Input interface	4 x 4-20mA isolated inputs
Conversion resolution	Delta-sigma 24bit
Output interface	Modbus RTU and Modbus RTU by RS485 or inbuilt USB to serial converter
Baudrate	9600, 19200, 38400, 115200
Modbus address	1 to 15
Configuration	6 way DIP switch for baudrate and Modbus address
Status indicators	4 x 4-20mA, 1 x serial data, 1 x power (dual colour)
Other option	24V DC isolated power for 4-20mA sensors
Power supply	8-36V DC or 5V from USB port
Housing	Aluminium with DIN rail mounting option

DOCUMENTATION

PRODUCT PAGE



AMB-12I-40

12 inputs 4 outputs
Modbus I/O expander

Input/output expander with Modbus RTU interface. It has 12 isolated digital inputs with range up to 30VDC and 4 relay NO output with load capability up to 230V/7A and 30V/7A DC range. The use of DC/DC technology for supplying relays enables a wide range of supply voltage.

FEATURES

- 12 digital isolated inputs
- Input and output indicators
- Up to 7 Ampere load
- Wide range of Modbus addresses and baud rates
- DIN rail mounting

ADVANTAGES

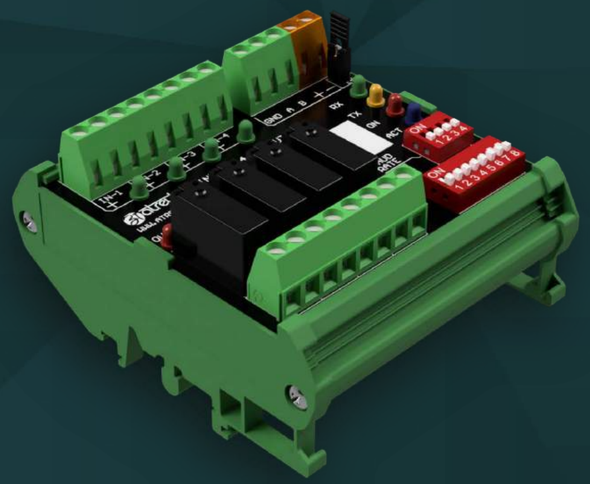
- Easy configuration by DIP switch
- Thanks to DC/DC technology for powering the relays, the power supply range is 8 to 36V
- The entire electronic circuitry is covered by a housing
- Supply with both AC and DC voltage
- Low power consumption, only 1.5W when relays are activated.

SPECIFICATION

Digital inputs	12 x opto-isolated digital input up to 30V DC
Outputs	4 x NO relay output 7A 230V or 7A 30V DC
Serial interface	1 x RS485, 1 x USB (inbuilt serial converter)
Baudrate	4800, 9600, 14400, 19200, 28800, 38400, 57600, 115200, 128000
Modbus address	1 to 247
Configuration	4 way DIP switch for serial baudrate 8 way DIP switch for Modbus address
Status indicators	12 x input, 4 x output, 2 x serial data, 1 x power, 1 x activity
Other functions	120 Ω termination jumper for RS485
Power supply	8-36V DC with reverse polarity protection or 8-24V AC
Housing	PVC DIN rail mount

DOCUMENTATION

PRODUCT PAGE



AMB-4I-4O

4 inputs 4 outputs
Modbus I/O expander

Input/output expander with Modbus RTU interface. It has 4 isolated digital inputs with range up to 30VDC and 4 relay NO output with up to 7A 230V AC and 7A 30V DC range. The use of DC/DC technology for supplying relays enables a wide range of supply voltage.

FEATURES

- 4 digital isolated inputs
- Input and output indicators
- Up to 7 Ampere load
- Wide range of Modbus addresses and baud rates
- DIN rail mounting

ADVANTAGES

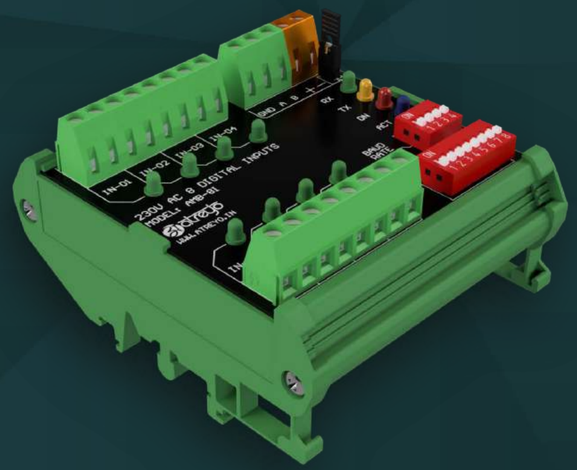
- Easy configuration by DIP switch
- Thanks to DC/DC technology for powering the relays, the power supply range is 8 to 36V
- The entire electronic circuitry is covered by a housing
- Supply with both AC and DC voltage
- Low power consumption, only 1.5W when relays are activated.

SPECIFICATION

Digital inputs	4 x opto-isolated digital input up to 30V DC
Outputs	4 x NO relay output 7A 230V or 7A 30V DC
Serial interface	1 x RS485
Baudrate	4800, 9600, 14400, 19200, 28800, 38400, 57600, 115200, 128000
Modbus address range	1 to 247
Configuration	4 way DIP switch for serial baudrate 8 way DIP switch for Modbus address
Status indicators	4 x input, 4 x output, 2 x serial data, 1 x power, 1 x activity
Other functions	120 Ω termination jumper for RS485
Power supply	8-36V DC with reverse polarity protection or 8-24V AC
Housing	PVC DIN rail mount

DOCUMENTATION

PRODUCT PAGE



AMB-8I-AC

High voltage 8 inputs
Modbus input expander

Digital input expander to Modbus RTU with high voltage input range of 60V AC to 500V AC. The input also accepts DC voltage within the same range. Used when it is necessary to detect the presence of high voltage in electrical panels. The power supply accepts either DC or AC voltage and has a range of 8 to 36V.

FEATURES

- Eight 60-500V AC or DC digital inputs
- Input indicators
- Multi baud-rate support
- Wide range of Modbus addresses and baud rates
- Wide power supply 8-36V DC or 8-24V AC
- DIN rail mounting

ADVANTAGES

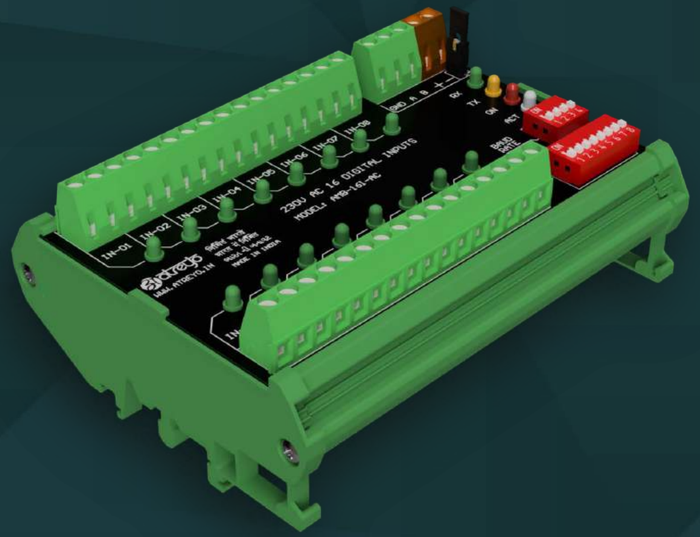
- High permissible input voltage allows use in 3-phase systems
- The inputs accept both AC and DC voltage
- Easy configuration by DIP switch
- The entire electronic circuitry is covered by a housing

SPECIFICATION

Digital inputs	8 x opto-isolated digital inputs 60 to 500V AC or DC
Serial interface	1 x RS485
Baudrate	4800, 9600, 14400, 19200, 28800, 38400, 57600, 115200, 128000
Modbus address	1 to 247
Configuration	4 way DIP switch for serial baudrate 8 way DIP switch for Modbus address
Status indicators	8 x input, 2 x serial data, 1 x power, 1 x activity
Other functions	120 Ω termination jumper for RS485
Power supply	8-36V DC with reverse polarity protection or 8-24V AC
Housing	PVC DIN rail mount

DOCUMENTATION

PRODUCT PAGE



AMB-16I-AC

High voltage 16 inputs
Modbus input expander

Digital isolated input expander to Modbus RTU with high voltage range of inputs - 60V AC to 500V AC. The input also accepts DC voltage within the same range. Used when it is necessary to detect the presence of high voltage in electrical panels. The power supply accepts either DC or AC voltage and has a range of 8 to 36V.

FEATURES

- Sixteen 60-500V AC or DC digital inputs
- Input indicators
- Multi baud-rate support
- Wide range of Modbus addresses and baud rates
- Wide power supply 8-36V DC or 8-24V AC
- DIN rail mounting

ADVANTAGES

- High permissible input voltage allows use in 3-phase systems
- The inputs accept both AC and DC voltage
- Easy configuration by DIP switch
- The entire electronic circuitry is covered by a housing

SPECIFICATION

Digital inputs	16 x opto-isolated digital inputs 60 to 500V AC or DC
Serial interface	1 x RS485
Baudrate	4800, 9600, 14400, 19200, 28800, 38400, 57600, 115200, 128000
Modbus address	1 to 247
Configuration	4 way DIP switch for serial baudrate 8 way DIP switch for Modbus address
Status indicators	16 x input, 2 x serial data, 1 x power, 1 x activity
Other functions	120 Ω termination jumper for RS485
Power supply	8-36V DC with reverse polarity protection or 8-24V AC
Housing	PVC DIN rail mount

DOCUMENTATION

PRODUCT PAGE



ADI-U4RS-1

USB to 4 x RS485 isolated interface

The interface ADI-U4RS-1 is a USB to four independent RS485 serial ports. Each port is separately optically isolated and protected against electrostatic discharge by TVS, GDT and PTC fuses. The interface can run on Linux, MAC OS and Windows. Highest quality FDI chip used.

FEATURES

- 4x RS485 ports isolated from each other ad from converter side
- Baudrate 600 to 921600
- RX and TX indicators for each serial port
- Each channel has a 120Ω termination via jumper
- Supply direct from USB
- DIN rail mounting

ADVANTAGES

- USB to serial chip -FT4232
- Custom baudrate support
- Robust USB type B socket
- The system creates 4 independent serial ports
- GDT protection for all RS485 ports

SPECIFICATION

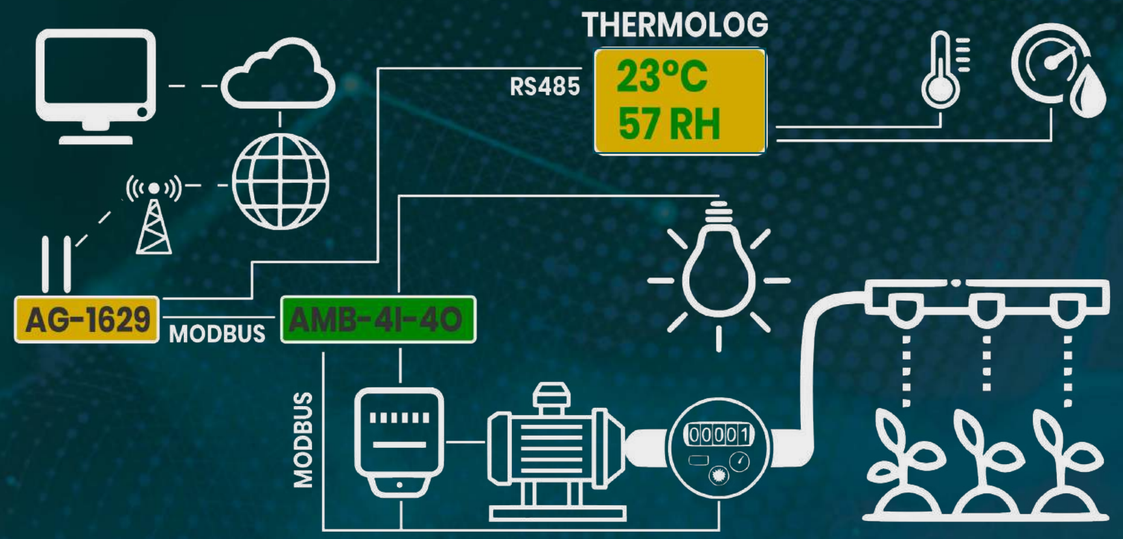
Serial interface	4 x RS485 galvanically isolated from each other
Baudrate range	600 to 921600
RS485 connection	A, B and ground, screw terminal
RS485 protection	Fail-safe receiver for bus open, short and idle
USB type	USB 2.0
USB to serial	FT4232
Status indicators	1 x power, RX and TX for each channel
Other option	120 Ω RS485 termination jumper
Power supply	Direct from USB port
Housing	PVC DIN rail mount

DOCUMENTATION

PRODUCT PAGE

Other Industrial Products

Data loggers
Sensors
Displays
Power supply
and other products



PLANT IRRIGATION AND LIGHTING SYSTEM

Find a wide variety of other products offered by Atreyo, such as data loggers, relays, various types of sensors, industrial displays, power supply, etc. dedicated to industrial solution and infrastructure management.



THERMOLOG V3-T

Temperature logger with big display

An application-specific temperature with data log storage in non-volatile memory. For applications that require visual temperature inspection. The range of the permitted temperature can be set using on-screen menu. It has feature to set alarm for threshold temperature range.

FEATURES

- Date logger option with logging to internal memory over 1.5 years
- Copying data on a USB stick
- Temperature and date in fix, scrolling and two lines display mode
- Configuration of all parameters using buttons and on-screen menus. Also configuration via PC application
- Modbus data out
- Multicolour display
- Wide power supply 8-36V DC

ADVANTAGES

- High RTC time accuracy up to 30s/years
- Thermometer - Dedicated PC programme for data display and configuration.
- Exporting measurement data from a PC program to Excel

SPECIFICATION

Display size	320 x 160mm
Display type	RGB LED SMD type, high brightness, 7 colours
Measurement range	-50°C to 120°C
Resolution	0.1°C
Accuracy	±0.5°C from -10°C to +85°C
Serial	1 x RS485 - Modbus slave
Temperature alarm	NO/NC relay output triggered when temperature falls outside permitted range
Alarm output	NO/NC potential free up to 230V and 3A load
Status indicators	1 x power, 1 x activity
Power supply	8-36V DC
Housing	Aluminium powder coated

DOCUMENTATION

PRODUCT PAGE



AUS-24-1

24V DC uninterruptible power supply with built-in battery

The AUS-24-1 is a DC UPS designed to safely power IoT devices such as gateways, routers, Ethernet switches and data loggers. It has built-in two 18650 cells and charge control with protection against over-temperature, over-charging and over-discharge. It features a high efficiency boost converter with short circuit protection.

FEATURES

- 24V in ad 24V out
- Built-in rechargeable batteries
- Over voltage and overload protections
- DIN rail mounting

ADVANTAGES

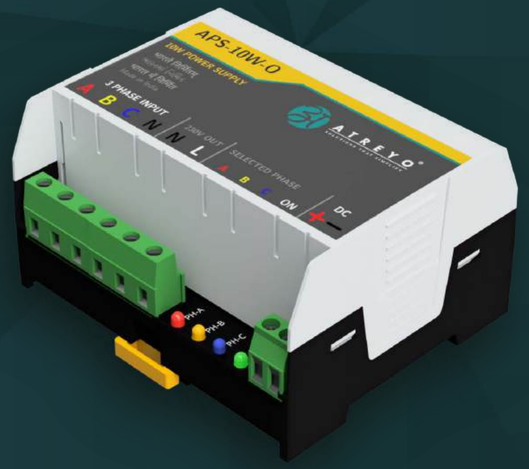
- Replaceable batteries
- Output voltage stabilization function
- Clear function indicators
- Over-temperature protection

SPECIFICATION

Input voltage	12-24V DC
Output Voltage	24V DC
Output power	20W maximum
Input protection	Fuse and surge
Over-current protection	Self-recovery
Short circuit protection	Self-recovery and output fuse
Voltage accuracy	±5.0 % (in battery mode)
Battery protection	Over-temperature, low voltage, battery balancer
Status indicators	1 power in, 1 x charging, 1 x standby, 1 x battery mode
Housing	Industrial grade ABS for DIN rail mounting

DOCUMENTATION

PRODUCT PAGE



APS-10W-O

3 phase 10W power supply with phase selector output

Power supply specifically designed for usage in IoT, industrial controls, gateways, electrical panel controllers and other applications that require constant power sources. Work with single, dual and three phase connection make ideal for critical equipment. This model offers 230V phase selector output for powering 230V devices like energy meters etc.

FEATURES

- Single phase output selector for powering additional devices such as power meters
- Available for 5V, 12V, 24V.
- Overvoltage and overload protection
- DIN rail mounting

ADVANTAGES

- Very high voltage rating
- Works on one two and three phase
- Indicators of the selected phase

SPECIFICATION

Power input	85V to 440V AC (PH to N), 85V AC to 520V AC (PH to PH)
Output Voltage	5V, 12V or 24V DC (depends on product variant)
Output power	10W
Input protection	Fuse and MOV for every phase
Over-current protection	≥110% Io, self-recovery
Short circuit protection	Hiccup, continuous, self-recovery and output fuse
Voltage accuracy	±5.0 %
Line regulation	±1.5 %
Phase selector out	230V single phase, 100W maximum
Status indicators	1 power out, 3 x current selected phase in phase selector
Housing	Industrial grade ABS for DIN rail mounting

DOCUMENTATION

PRODUCT PAGE



APS-20W-O

3 phase 20W power supply with phase selector output

20W power supply specifically designed for usage in IoT, industrial controls, gateways, electrical panel controllers and other applications that require constant power sources. Work with single, dual and three phase connection make ideal for critical equipment. This model offers 230V phase selector output for powering 230V devices like energy meters etc.

FEATURES

- Single phase output selector for powering additional devices such as power meters
- Available for 5V, 12V, 24V
- Overvoltage and overload protection
- DIN rail mounting

ADVANTAGES

- Very high voltage rating
- Works on one two and three phase
- Indicators of the selected phase

SPECIFICATION

Power input	85V to 440V AC (PH to N), 85V AC to 440V AC (PH to PH)
Output Voltage	5V, 12V or 24V DC (depends on product variant)
Output power	20W
Input protection	Fuse and MOV for every phase
Over-current protection	≥150% Io, self-recovery
Short circuit protection	Hiccup, continuous, self-recovery and output fuse
Voltage accuracy	±2.0 %
Line regulation	±1.0 %
Phase selector out	230V single phase, 100W maximum
Status indicators	1 power out, 3 x current selected phase in phase selector
Housing	Industrial grade ABS for DIN rail mounting

DOCUMENTATION

PRODUCT PAGE

Computer and IoT gateway Comparison

Product Features	AIC-550	AG-1629	AG-702	AG-221	AG-743
CPU (MHz)	1800	960	580	580	580
CPU core	4	4	1	1	1
RAM	2/4/9GB	512 MB	256MB	256MB	256MB
Flash/eMMC/Storage	16/32/64GB	8-64GB	64+512MB	64+512MB	64+512MB
HDD/SSD	SSD M.2				
4G/LTE	✓	✓	✓	✓	✓
3G	GL model	GL model	GL model	GL model	GL model
2G	✓	✓	✓	✓	✓
SIM card slots	2	2	2	2	2
Ethernet ports	2	2	2	2	4
Ethernet (Mbps)	10/100/1000	10/100	10/100	10/100	10/100
PoE		✓	✓	✓	✓
WiFi standard	802.11a/b/g/n/ac (WL5)	802.11a/b/g/n/ac (WL5)	802.11b/g/n	802.11b/g/n	802.11b/g/n
WiFi hotspot	✓	✓	✓	✓	✓
GNSS	✓	✓	✓	✓	✓
RS485	2 x isolated	2 x isolated	1 x isolated	1 x isolated	1 x isolated
RS232			1 x isolated		
Digital inputs	1	4 x isolated	2 x isolated	2 x isolated	1 x isolated
Digital outputs		4 x optomos	1 x relay		1 x isolated
Audio out	✓				
Bluetooth	(WL5)	(WL5/BT1)			
USB	3	2	1 host		1 host
HDMI	1 (4K)				
MicroSD card	✓	✓			
Battery backup					
superCAP backup					
Power supply (V)	8-57	8-48	8-48	8-48	8-48
Enclosure material	aluminium	aluminium	aluminium	aluminium	aluminium
DIN Rail mounting	✓	✓	✓	✓	✓
Earthing terminal	✓	✓	✓	✓	✓
Atra support	✓		✓	✓	✓
Operating system	Linux	Linux	openWRT	openWRT	openWRT
Custom scripts	✓	✓	✓	✓	✓
VPN support	✓	✓	✓	✓	✓

Legend: blank - not applicable/available, ✓ - available, optional - in selected product versions

Computer and IoT gateway Comparison

Product Features	AG-201	AG-1115	AG-831	ALWG-1638
CPU (MHz)	500	500	180	960
CPU core	1	1	1	4
RAM	16MB	16MB	256kB	512MB
Flash/eMMC/Storage		optional	8MB	8GB
HDD/SSD				
4G/LTE	✓	✓	✓	✓
3G				optional
2G	✓	✓	✓	✓
SIM card slots	1	2	1	2
LoRa / LoRaWAN ®				✓
Ethernet ports			1	1
Ethernet (Mbps)			10/100	10/100
PoE			✓	✓
WiFi standard				802.11b/g/n
WiFi hotspot				✓
GNSS		✓	✓	✓
RS485	1	1 x isolated	1 x isolated	
RS232				
Digital inputs		5 x isolated	2 x isolated	
Digital outputs		2	3	
USB	update only	update only	update only	1 debug
HDMI				
microSD card			optional	
Battery backup		optional		
SuperCAP backup		optional	optional	✓
Power supply (V)	8-36	8-36	8-36	37-57
Enclosure material	aluminium	aluminium	aluminium	aluminium
DIN Rail mounting	✓	✓	✓	
Earthing terminal	✓	✓	✓	
Atra RMS support				
Operating system	embedded	embedded	embedded	openWRT
Custom scripts				✓
VPN support				✓

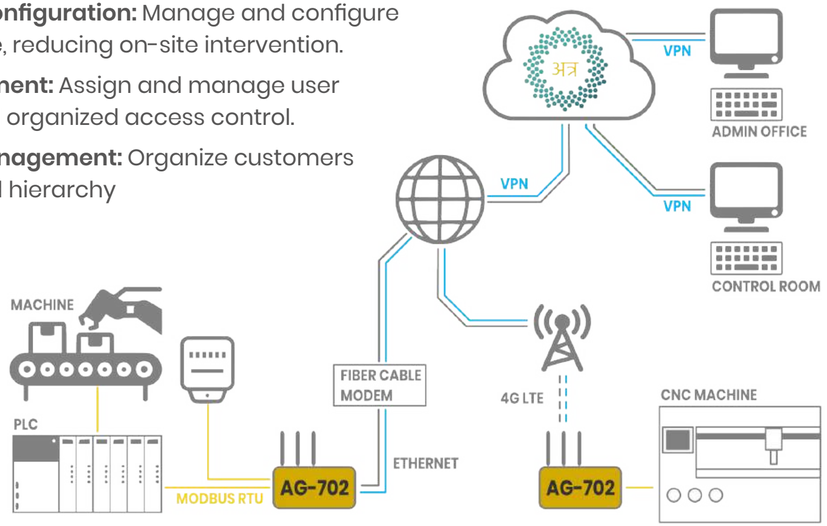
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RMS Remote Management System

Atra RMS is a powerful, user-friendly IoT solution designed to streamline device management, real-time monitoring, and secure connectivity. Control your Atra RMS devices effortlessly, monitor performance, and access them remotely from anywhere via a centralized system. With robust VPN capabilities and intuitive tools, Atra RMS ensures secure, scalable, and efficient management for all your IoT needs.

Features & Functions

- **Secure VPN tunnels:** Connect devices and users in a unified network, enabling seamless remote access and device-to-device communication without public IPs or external VPNs.
- **Real-time device monitoring:** Track device health, network status, and GPS location instantly for proactive management.
- **Remote infrastructure & configuration:** Manage and configure devices remotely with ease, reducing on-site intervention.
- **User and access management:** Assign and manage user permissions for secure and organized access control.
- **Hierarchical customer management:** Organize customers and devices in a structured hierarchy for simplified oversight.



Why Choose Atra RMS?

Atra RMS empowers you to manage your IoT ecosystem with unmatched simplicity and security. Whether you're overseeing a small network or a global deployment, our solution delivers real-time insights, secure connectivity, and effortless control — all tailored to your needs.



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