



AVCOMM®

ATMS Datasheet

Aiming to create better and safer working environments and life experiences through the products we deliver.



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Private IIoT Cloud with Device Maintenance over the Air

ATMS is an intelligent private IIoT platform that fits for your private IIoT platform requirement. It provides flexible and secured access from any web browser either in PC or smart phone. It also support RTSP streaming which allows you to broadcast from cloud to remote gateways via Voice over IP. Field video surveillance is also supporting cloud environment monitor via IP cameras. ATMS enables fast, flexible, secured dashboard for multi-user and supports MQTT and RESTful API for easy access to data from an IIoT gateway. ATMS OTA is also designed for central network management such as device configuration, firmware version upgrade, fault alert and event records.



Features & Benefits

ATMS Agent

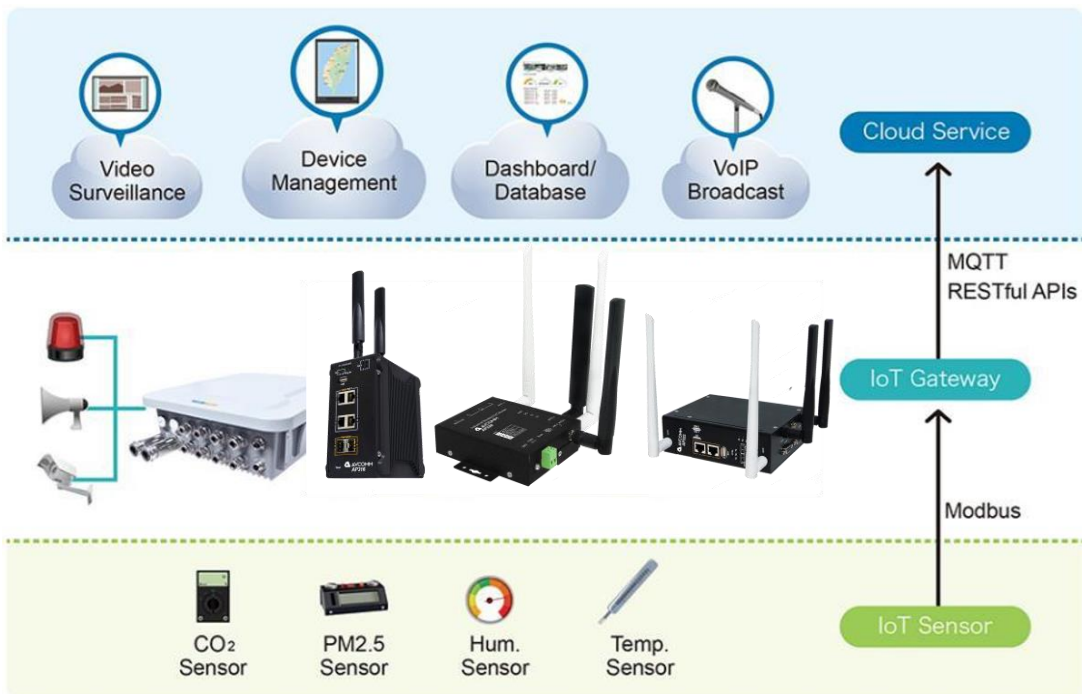
The ATMS agent sends data (TLS/SSL encrypted) via the cellular network or Ethernet to the ATMS data center in the cloud.

Secure Data in Cloud

The ATMS Server is a secured private cloud and public cloud service (AWS) where all your data is stored and accessed. It uses the latest TLS encryption and X.509 authentication to protect the data transmission

ATMS OTA

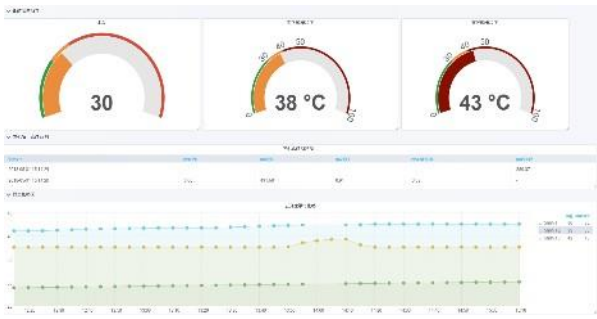
Interactive monitoring dashboard and map shows the status, signal strength, and location. Set alerts on critical events to flow-based program prevent downtime. Node-RED like ing.



ATMS: Dynamic, Fast and Flexible Dashboards

- Provides multi-user management, each logged-in user has his own Dashboard configuration.
- Provide a variety of data sources to obtain data
- Provide a variety of Widgets to display data.
- Provides flexible themes.
- Meet RWD (Responsive Web Design) requirements for desktop and mobile devices.

Dashboard for Visualize, Monitor and Control



Video Surveillance, Fault Alert, Voice Broadcast and Event Records



Secured Multi-sites Management

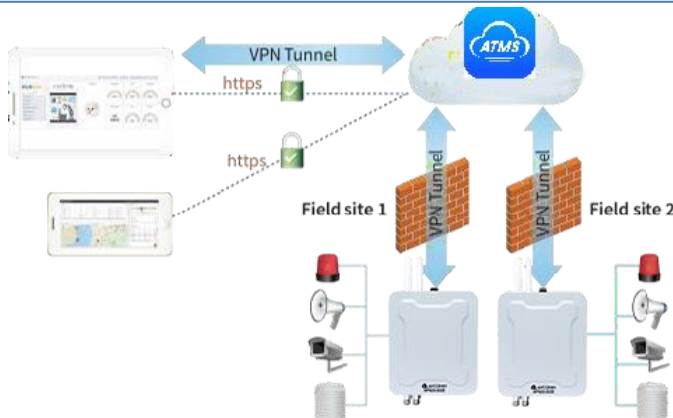
N to N VPN

Latest TLS encryption and X.509 authentication

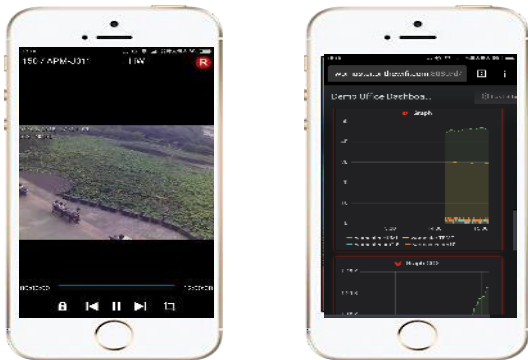
VoIP Voice Broadcast

RTSP voice streaming Server/Client for VoIP broadcast

1 to N VoIP broadcasting



Responsive Web Design for Desktop and Mobile Devices

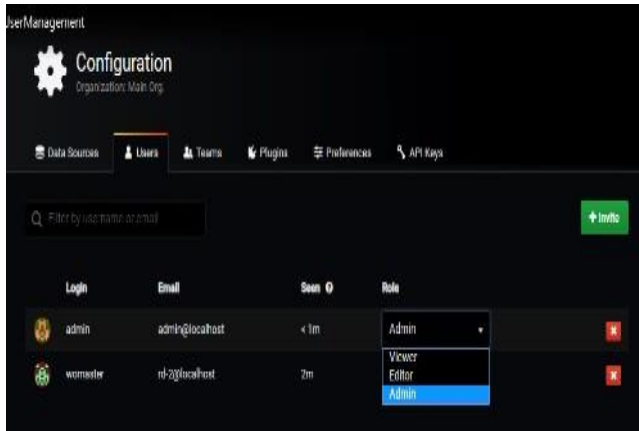


Intuitive Steps to Add New Thing

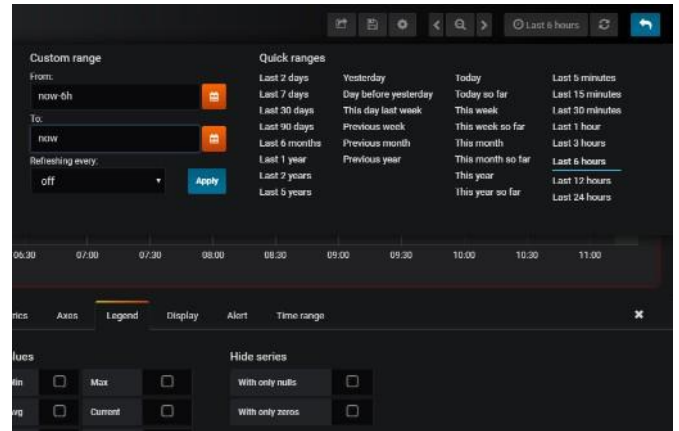
1. Device Management → 2. Add Device → 3. Copy Access Token to Device → 4. Done

User Management

Provides multi-user management, each logged-in user has his own privilege.

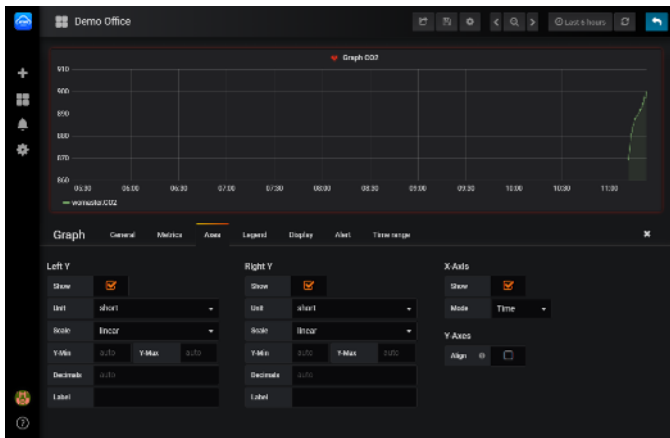


Configurable Time Range and Refresh Interval.



Fast and Flexible Graphs Options

Fast and flexible client graphs with many options. Panel plugins for different ways to visualize metrics and logs.



Easy Add Graph Panel

From heat maps to histograms. A variety of display options to help data visualization



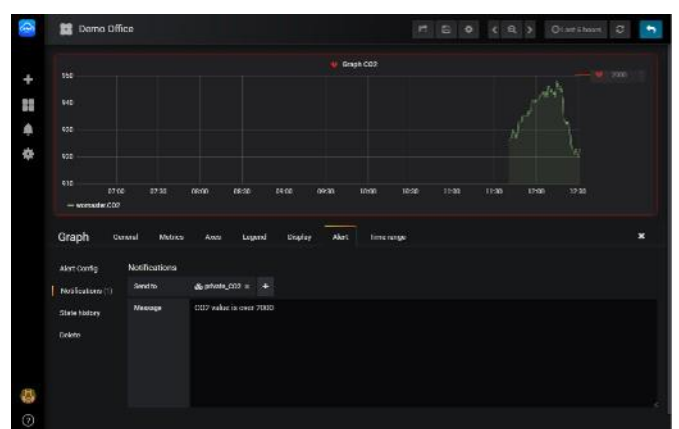
Analyze Logged Data

Show Histogram of time series data.



Alert

Visually define alert rules for important metrics



ATMS OTA : Device Management Over-the-Air

- Interactive monitoring dashboard and map shows the status, signal strength, and location of all WR series deployed
- MAP shows devices online/offline/warning status in Green/Red/Orange color, respectively
- Supports over-the-air batch device configuration and firmware* update
- Set alerts on critical events to prevent downtime (i.e. signal strength is too low or temperature is too high)
- Node-RED like flow-based programming
- Support the latest TLS encryption and X.509 authentication

Interactive monitoring and map shows the status, signal strength, location and route

Device Management OTA

Entity name	Entry type	RSSI	Modelname	Device Name	Mac Address	Version	Active	LastConnectTime	LastActivityTime	Serial number
0081200-Longtan	Device	-90	0081200	router	94.66.w7.9f.34.83	1.2.8	True	2018-11-06 10:07:38	2018-11-06 10:07:38	N/A
0081200-Xindian	Device	-85	0081200	router	94.66.w7.9f.00.00	beta-10241530	True	2018-11-06 09:59:29	2018-11-06 09:59:29	N/A
0081200-Yancheng	Device	-87	0081200	router	94.66.w7.9f.00.00	1.2.8	True	2018-11-06 09:59:29	2018-11-06 09:59:29	N/A
WR322	Device	-87	WR32206-WLANHLTE-E	router	94.66.w7.9f.31.12	1.4.1	True	2018-11-06 09:59:27	2018-11-06 09:59:27	N/A

RSSI History

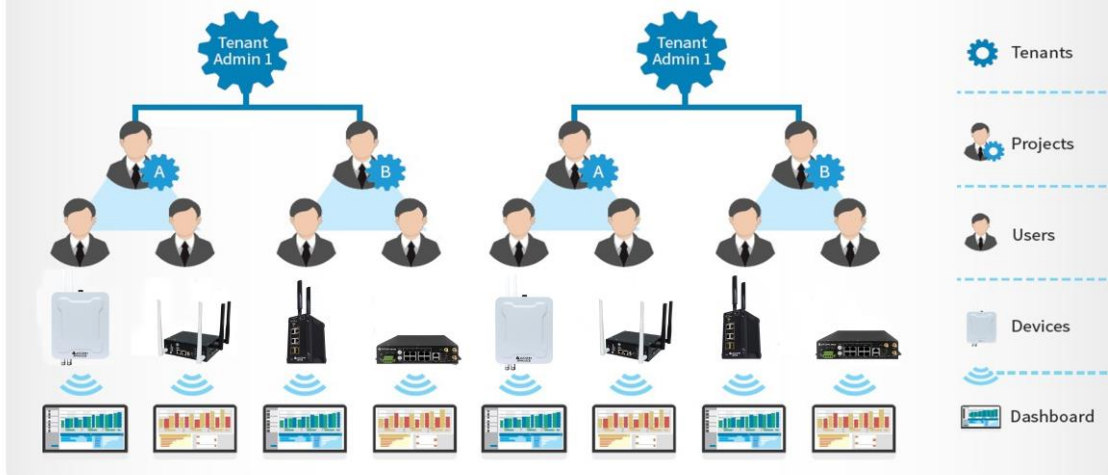
Alarms

Created time	Originator	Type	Severity	Status
2018-11-06 10:07:38	WR3220	Critical RSSI	Critical	Cleared Unacknow
2018-11-06 09:59:29	WR3220	Critical RSSI	Critical	Cleared Unacknow
2018-11-06 09:59:29	WR3220	Speeding Alarm	Critical	Cleared Unacknow
2018-11-06 09:59:27	WR3220	Critical RSSI	Critical	Cleared Unacknow
2018-11-06 09:59:27	WR3220	Speeding	Critical	Cleared Unacknow

Multi-Tenant, Project based IoT deployment

Group Management

- Multi-Tenant Architecture
- Grouping and organize tasks for IoT deployment
- Each user has his own Dashboard



ATMS OTA : Device Management Over-the-Air

- Model name/MAC address/FW version/RSSI/Last Connection Time/Last Activity Time
- MAP shows devices online/offline/Warning status in Green/Red/Orange color, respectively

Google MAP Integration

The screenshot shows a table with columns for Device ID, Device Name, Model Name, Device Type, Device Status, Device Location, Device MAC, Device FW, Device RSSI, Device Last Connection Time, and Device Last Activity Time. Below the table is a Google Map showing the geographical distribution of these devices across various regions.

Monitor Device Information

This panel provides detailed information for a selected device, including its model name, MAC address, firmware version, and RSSI. It also features a real-time graph showing signal strength fluctuations over time.

Display device location, route and speed on the Map

The map displays a specific route through a city area, with numbered markers (1-10) indicating the location and speed of individual devices along that path.

Group Configuration and Reboot OTA

Group Selection

The interface shows a list of selected entities (WR224, WR312, WR322, WR329) and an 'Import device config' dialog box with a file upload area and 'IMPORT' and 'CANCEL' buttons.

Rule Engine: Node-RED like flow-based programming

The screenshot shows a flow-based programming interface with various nodes connected. A red box highlights a specific flow labeled 'Alarm Rule', while other flows are labeled as 'Default Rule'.

Diverse Industrial IoT Solutions

- Industrial 4.0 Solution for Monitor machine downtime duration/occurrence, yield rate, productivity, achievement rate, etc.
- Smart Environment Control Solution for Monitor PM1/2.5/10, CO2, temperature, humidity, radiation, wind speed, etc.
- Smart Water Quality Control Solution for Monitor water EC, DO, PH, NH3-N, etc.
- Smart Bus Tracking Solution for Monitor bus route, speed, fuel, etc.
- Smart Metering Solution for Monitor district energy consumed, water consumed, etc.
- Smart Energy Solution for Monitor meter voltage, frequency, power, current, energy consumption, etc.
- Smart Farming Solution for Monitor silos weights, silos temperature, silos humidity, etc.

Industrial 4.0 Solution



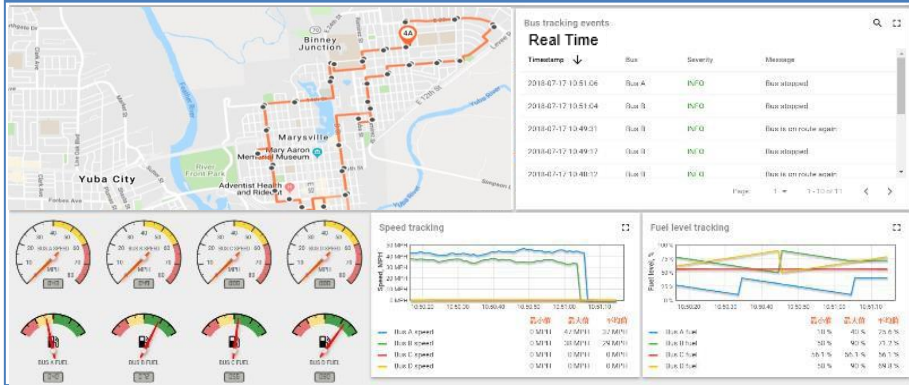
Smart Environment Control Solution



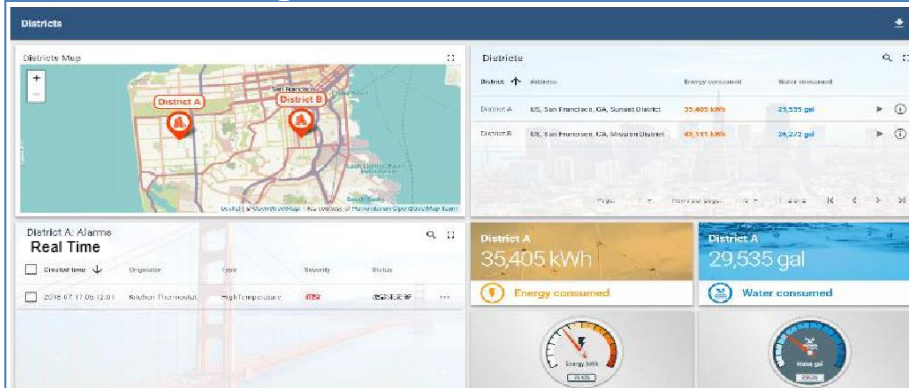
Smart Water Quality Control Solution



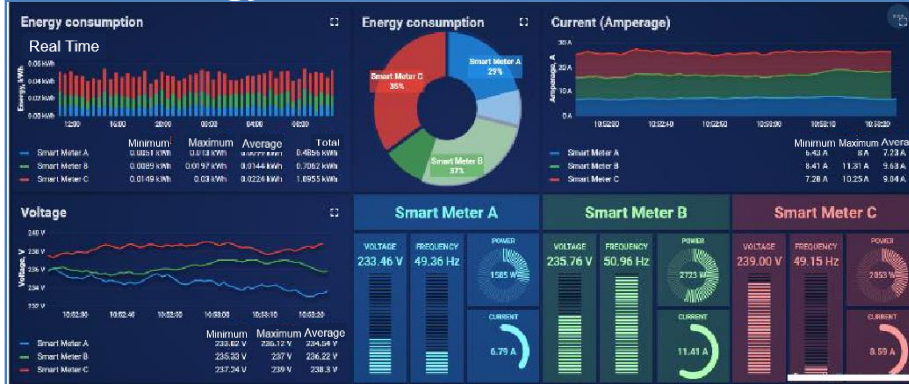
Smart Bus Tracking Solution



Smart Metering Solution



Smart Energy Solution



Smart Farming Solution



System requirements for private cloud

Cloud Server	
CPU	Intel® i5 4 core Processor
RAM	8GB DDR3
Storage	at least 20G free space

System requirements for public cloud

ATMS Server can be deployed on an AWS EC2 Instance (Amazon Web Service) or Microsoft Azure. Please contact your regional sales representative for details..



Ordering Information

Model Name	Description
SCB1200	Industrial Smart City Box with 4GT PoE + 2GF, 1GT WAN, IIoT interfaces
ATMS-1GW(trial version)	1 gateways and each gateway supports 25 Modbus tags
ATMS-10GW	10 gateways and each gateway supports 25 Modbus tags
ATMS-50GW	50 gateways and each gateway supports 25 Modbus tags
ATMS-100GW	100 gateways and each gateway supports 25 Modbus tags