# ESRP-PCS-ADAM3600

### **Wireless Intelligent Remote terminal unit**



### **Features**

- High Performance CPU Cortex A8 600MHz
- Low Power DDR3L 256MB RAM
- · Embedded Real-time Linux Kernel
- Domain Focused Onboard IO -8AI / 8DI / 4DO
- 4-Slot I/O Expansion
- High I/O Flexibility with 4-slot I/O Expansion
- Multiple wireless options for Zigbee/ Wi-Fi/ 3G/ 4G/ GPRS
- IEC61131-3&C Programming Language
- Modbus & DNP3 & IEC-60870-5-104
- Operation Temperature -40 ~ 70°C
- Internal Webpage for Online Monitoring
- Data Logger on SD card
- Support Azure IOT-Hub
- Support MQTT Client for cloud communication

### Introduction

ADAM-3600-C2G is a cloud ready intelligent Remote Terminal Unit with multiple wireless function capability, multiple I/O selection, wide temperature range and supports flexible communication protocol for edge application of data collection, preprocessing and transmission to cloud. In these application environments, ADAM-3600 with WISE-PaaS/EdgeLink is a leading device in the field of environmental conservation and can satisfy the needs of environmental monitoring.

### **Features**

#### Wide Array of Flexible I/Os

Wide array of on-board I/O and flexible expansion I/O modules supporting different acquisition requirements giving it a high cost performance.



#### **Wireless Communication & Protocols**

The ADAM-3600 simultaneously supports two mini-PCle cards (a half-size and a full-size) for Wi-Fi/ 3G/ GPRS/ Zigbee communication which is flexible for wiring in the field. Modbus RTU/TCP and DNP3 protocols integrate ADAM-3600 with more SCADA systems.



### **Wide Temperature Range**

A –40  $\sim$  70 °C operating temperature allows the ADAM–3600 to work in harsh environments and reduces maintenance costs for customers.



#### **Remote Firmware Update**

The ADAM-3600 can use a USB drive and an SD card to automatically update the firmware so there's no need to bring a computer and execute the configuration program in the field.



#### Intelligent Connectivity Diagnosis Manager (iCD Manager)

Remotely monitor serial and Ethernet port status and send alarm information during communication failures to help improve intelligent monitoring.



#### **Node ID for Batch Configuration**

Each ADAM-3600 has a node ID as its name to support batch configuration (max.64) with the configuration utility. When an alarm is displayed on the utility, customers can directly find the fault source with the node ID.



# **Specifications**

#### **Control System**

- CPU Cortex-A8 AM3352 Memory RAM 256MB Battery Backup RAM 32KB

0S RT-Linux V3.12

MicroSD card / 1GB included for system Storage SD card / 4GB included for data storage

IEC-61131-3, Linux C **Programming** 

Watchdog Real-time Clock Yes 10 ~ 30 Vnc Power Input 24V @ 5W Power Consumption

#### **Communication**

Protocol Modbus/TCP, DNP3 L2, TCP/IP, DHCP, IEC104, MQTT

Serial Port 1 x RS232/485- DB9 2 x RS485- Terminal Block 2 x RJ-45 10/100 Mbps **Ethernet Port** 

**USB** Port 1 x USB 2.0 **VGA Port** 1 x D-SUB15 LED System LEDs/ IO LEDs

Isolation 2000 V<sub>DC</sub>

PLC driver support Siemens/Mitsubishi/Omron/Allen-Bradley, Delta etc

Cyber Security SSL, SSH, white list

#### **Analog Input**

8 differential Channel Resolution

16-bit ±10V, ±2.5V, 0 ~ 20mA, 4 ~ 20mA Input Type

Isolation 2,000 V<sub>DC</sub>

#### **Digital Input**

Channel

Input Type Wet Contact Protection Voltage  $+40~V_{DC}$ 2,000 V<sub>DC</sub> Isolation

#### **Digital Output**

Channel

Open Collector (Sink) **Output Type** 

Rated Voltage 8 ~ 30 V<sub>DC</sub> 2,000 V<sub>DC</sub> Isolation

#### **Wireless Communication (Selectable)**

Interface Mini-PCle (1 x Half-Size / 1 x Full-Size)

Zigbee- UART Signal Wi-Fi/3G/GPRS- USB Signal Wireless Type

#### General

Certification CE/FCC Operating Temp. -40 ~ 70°C -40 ~ 85°C Storage Temp.

5 ~ 95%(no-condensation) Humidity Mounting DIN 35 rail/ Wall Mount

#### I/O Expansion Module Selection Table

Unit: Channels

Expansion Module	RTD	Al	T.C.	A0	DI	DO
ADAM-3613	4					
ADAM-3617		4				
ADAM-3618			4			
ADAM-3624				4		
ADAM-3651					8	
ADAM-3656						8

## **Ordering Information**

■ ESRP-PCS-ADAM3600 Wireless Intelligent Remote terminal unit w/ I/Os

## **Optional Accessory**

#### 4G/3G Solution (SIM card is not included)

EWM-C117FL04E1750006264 LTE/HSPA+/GPRS module, w/ SIM Slot,

SMA(F) Cable, 15 cm 4G LTE 700 ~ 960 MHz, 1710 ~ 2700 MHz 1750008424-01

#### WIFI Solution (recommended)

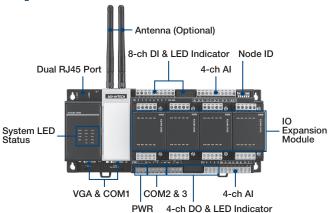
96PD-RYUW131 2.4GHz Wi-Fi Full/Half Size Mini PCle Card 9656EWMG00E Half to full-size Mini PCle bracket pack(optional)

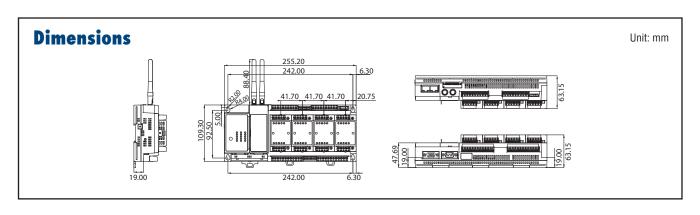
1750006043 SMA(M) cable, 15 cm 1750000318 2dBi antenna for testing, 11 cm

#### **GPS Solution**

EWM-G108H01E GPS/GNSS Half-MiniPCle card 1750006264 SMA (F) Cable, 15cm 1750006432 Antenna 4.5 dBi, 500cm

## Layout





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ESRP-PCS-ADAM3600