



AirShield Wireless Security Systems

By Dahua Technology



Simple integration based on standard alarm protocols



Remote management and maintenance via DMSS



Real-time notifications and online monitoring



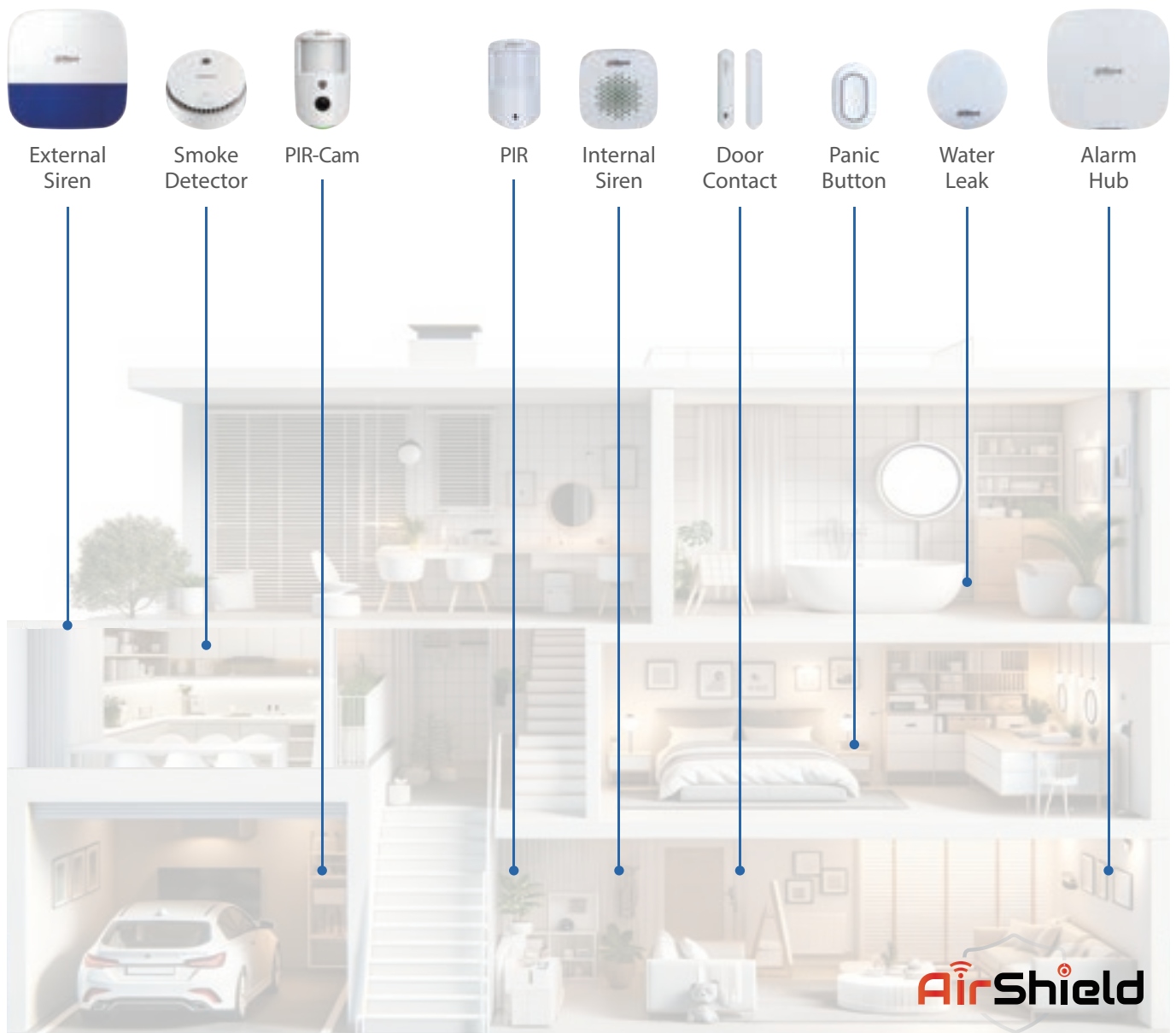
Compatibility with CCTV and video intercom systems

*Compliant to PD 6662:2017 standard.

Overview

The **Dahua AirShield Wireless Security System** consists of alarm hubs, various wireless peripheral devices and several applications for end-users, installers and ARCs. It complies with EN50131 Grade-2 standards and is equipped with cutting-edge technologies to ensure the safety, reliability and ease of use of the system.

Featuring easy installation, stable connectivity, user-friendly mobile management and other advanced functions, the system provides modern homes and commercial buildings with tangible protection – all achieved using an invisible connection.



Technologies

The **AirShield Wireless Security System** is advanced, stable and reliable thanks to the application of these technologies: Airfly 3.0, RF-HD, and Cloud services.

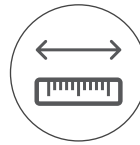
Airfly 3.0



Frequency hopping



2-way communication



Long-range



AES128 Encryption

Wireless RF communication technology that uses Sub-G (433MHz or 868MHz) for event transmissions between the Hub and peripherals. It offers excellent stability, reliability and communication range.

RF-HD



2.4GHz



Fast image transmission



High resolution

RF-HD is applied in image transmission. It uses the 2.4GHz band and features faster image transmission speeds and higher image resolution (up to 2MP).

Cloud



DMSS for end-users



DoLink Care for Installer



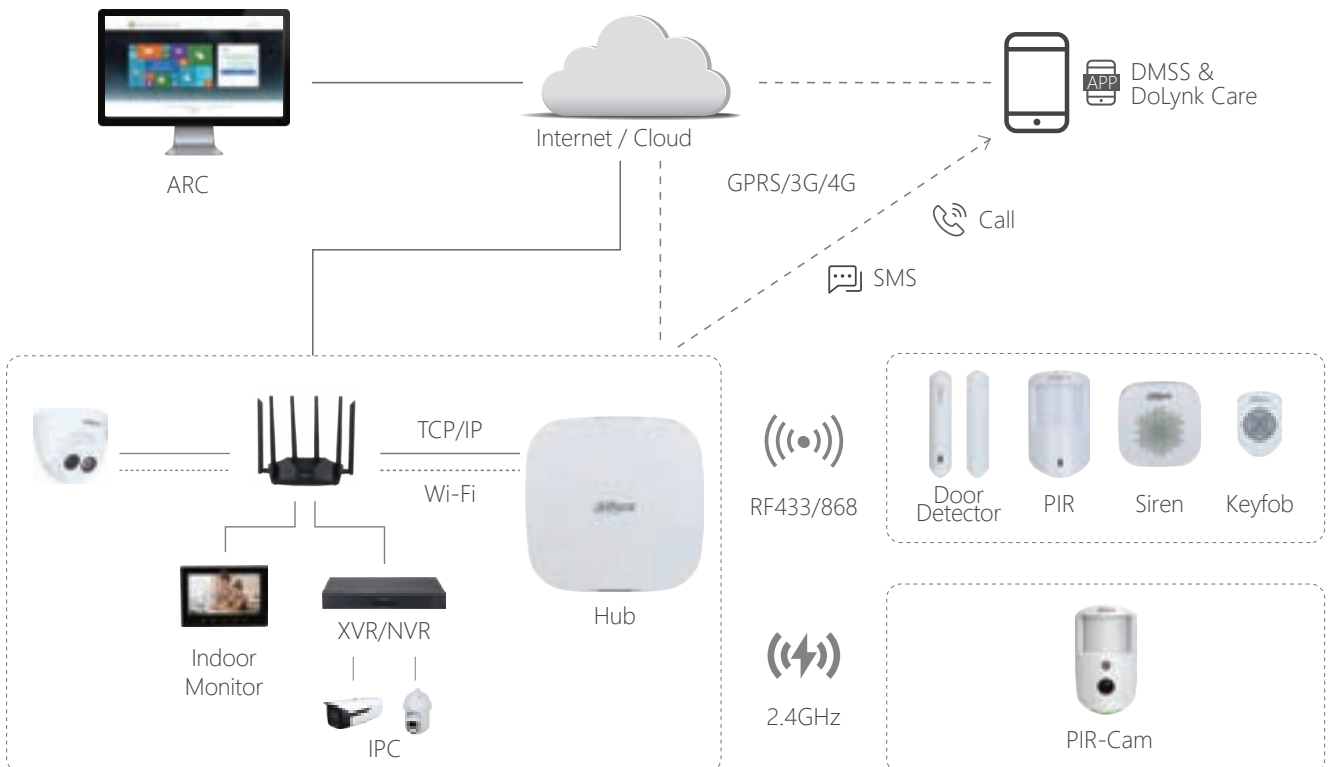
Converter for ARCs

Based on Dahua's Cloud services, we make alarm monitoring more convenient, efficient, economical, and a better all-round experience.

Topology

As shown below, the Alarm Hub is the core of the wireless alarm system, which communicates with wireless peripheral devices through Airfly 3.0, and then accesses the Internet to interact with upper-level application software, such as the Mobile App, ARC Platform (Alarm Receiving Centre) and through the following methods: Ethernet, Wi-Fi and 4G/3G/GPRS.

There are two Hub models available depending on how it is connected to the network – either Wi-Fi or 4G. The 4G model supports SMS and Alarm Calling.



Recommended Products

CONTROL PANEL



Hub

ARC3000H-W2(868)

ARC3000H-FW2(868)

With a brand new industrial design and advanced technology, this new generation of wireless alarm Hubs is easier to install, looks more aesthetically pleasing, communicates more reliably with peripheral devices and offers more stability.

With the reassurance that the mobile app DMSS (for end-users) and DoLynk Care (for installers) brings, you can receive real-time notifications, control and manage all of your devices, perform remote operations and much more.



Multiple networking methods



Visual verification



Built-in rechargeable battery



Cloud updates

The Wireless Repeater can extend the communication range between the Hub and the peripheral devices, and forwards messages received from the peripherals to the Hub. It can provide a secondary communication path, which helps improve the overall stability and reliability of the communication of this wireless security system. You can select a path manually or allow the system to automatically select one of the options on the mobile app.



Up to 32 peripherals



Auto switches between dual antennas



Manual and auto-pairing



Cloud updates



Repeater

ARA43-W2(868)

MOTION DETECTOR



PIR Detector
ARD1233-W2(868)

The wireless PIR Detector can detect if there is a human moving around and provide real-time notifications of alarm events. It can also differentiate between humans and animals to reduce false alarms.



Pet immune



Up to 4 years



Temperature measurement



Cloud updates

With the built-in 2MP CMOS image sensor, the wireless PIR-Camera can capture snapshots in high resolution when it detects an intruder, and then transmit them to the Hub. The PIR-Camera can protect your privacy by taking snapshots only when an intrusion occurs or a snapshot command is given by an admin user.



Pet immune



Fast transmission



Temperature measurement



Cloud updates



PIR-Camera
ARD1731-W2(868)



Dual-Tech Detector
ARD2231-W2(868)



The wireless Dual-Tech Detector is an indoor detector for human intrusion. With passive IR and microwave technologies, the device can detect human body movements and activate the alarm when the target enters the detection range.



Pet immune



PIR & Microwave



Temperature measurement



Cloud updates

DETECTORS



Glass Break Detector
ARD512-W2(868)

The wireless Glass Break Detector monitors surrounding audio signals. With an advanced algorithm it can tell if the glass has been broken.



Wired input



Up to 3 years



Temperature measurement



Cloud updates

The wireless Smoke Detector provides battery-powered smoke detection and alarm functions within a single unit. It can provide early detection of smoke, with reduced false alarms.



Split-spectrum sensor



Up to 3 years



Test and silence button



Over 85dB(A)



Low quiescent current consumption



Smoke Detector
HY-SA21A-W2(868)



Water Leak Detector
ARD912-W2(868)

The Wireless Water Leak Detector detects water leakage in a monitored area and sends alerts to the Hub.



Hassle-free installation



Up to 3 years



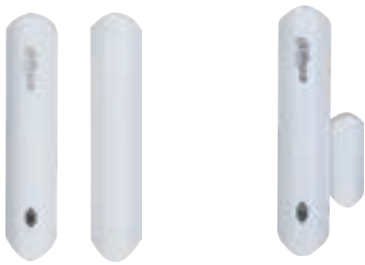
One-piece/
Detached models



Cloud updates

MAGNETIC CONTACT

The wireless Door Contact consists of a sensor and a magnet that can trigger an alarm when an armed door or window is opened.




Door Contact


ARD323-W2(868) ARD323-W2(868S)



 Temperature measurement

 Up to 5 years


 Wired input

 Cloud updates


The wireless Door Contact Plus can detect not only the opening or closing of a door or window, but also if it's been left ajar or someone hits it.



 Temperature measurement

 Up to 3 years

 Wired input

 Cloud updates



Door Contact Plus

ARD324-W2(868) ARD324-W2(868S)

REMOTE CONTROL



Keypad
ARK30T-W2(868)

The wireless Keypad supports multiple users, allowing them to arm/disarm the alarm security system with their own passcodes and IC cards.



3 shortcut alarms



Duress alarm



No password arming



Cloud updates

The wireless Keyfob can remotely control the wireless security system.



Emergency alarms



Up to 5 years



Cloud updates



Keyfob
ARA24-W2(868)



Panic Button (Single)
ARD821-W2(868)



Panic Button (Dual)
ARD822-W2(868)

The wireless Panic Button supports multiple types of alarms to meet a wide variety of scenarios. It can trigger alarms for intrusions, fire, gas leaks, and more. The Panic Button (Single) can be set to control a Relay or Wall Switch.



IP54



Accidental touch prevention



Up to 5 years



Cloud updates





SIREN

The wireless Internal Siren is an indoor siren that activates when an alarm event occurs. It offers danger warnings and intrusion deterrence. It can also be configured as a doorbell when the system is disarmed.







Internal Siren
ARA12-W2(868)



-  Up to 2.5 years
-  Multiple sounds
-  Doorbell function
-  Cloud updates

The wireless External Siren is an outdoor siren that activates a loud sound when an alarm event occurs, thus attracting the attention of everyone within its vicinity.



-  Temperature measurement
-  Multiple sounds
-  IP65
-  Cloud updates



External Siren
ARA13-W2(868)

I/O EXPANDER



Input Expander
ARM310-W2(868)

The wireless Input Expander is a conversion device that can connect with a wired detector and forward its alarm events to the hub.



Multiple alarm types



Up to 5 years



Input types:
NO, NC & Pulse



Cloud updates

The wireless Relay is used to control the power supply of other devices using created scenarios or mobile apps.



Overheat & overload protection



Power supply:
7-24V DC



Load capacity:
0-36V 5A DC



Cloud updates

Relay
ARM7011-W2(868)

The wireless Wall Switch is similar to a Relay in terms of functions. The main differences between them are the power supply and relay output.



WallSwitch
ARM7012-W2(868)



Overheat & overload protection



Power supply:
100-240V AC



Relay output:
100-240V 13A AC



Cloud updates



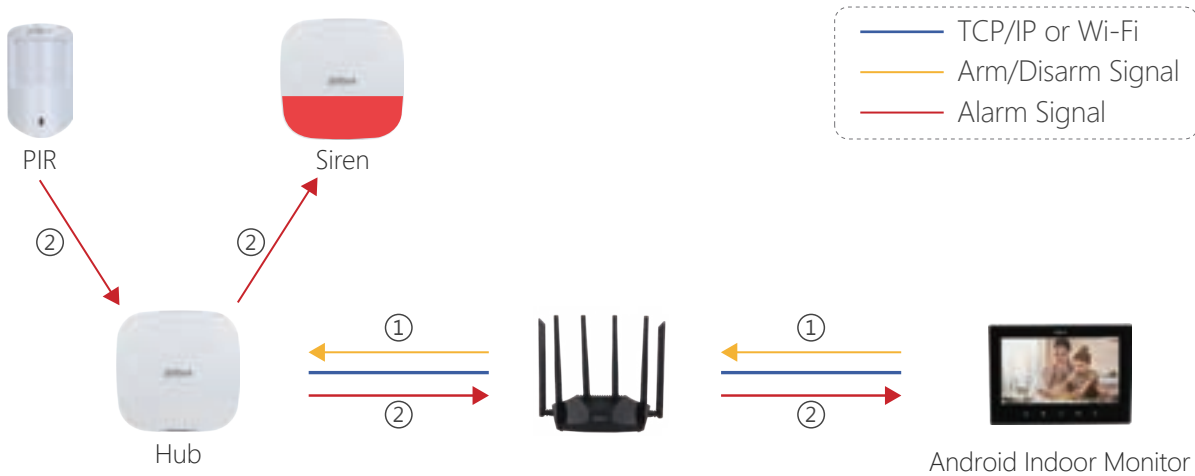
Monitors voltage, current and energy consumption

Solutions



Interconnection with Indoor Monitor

The Hub performs an information exchange with the indoor monitor via the LAN, eliminating the need for additional wiring. The indoor monitor can be used as an alarm keypad with a touch screen, which can provides reassurance to the residents of a property.



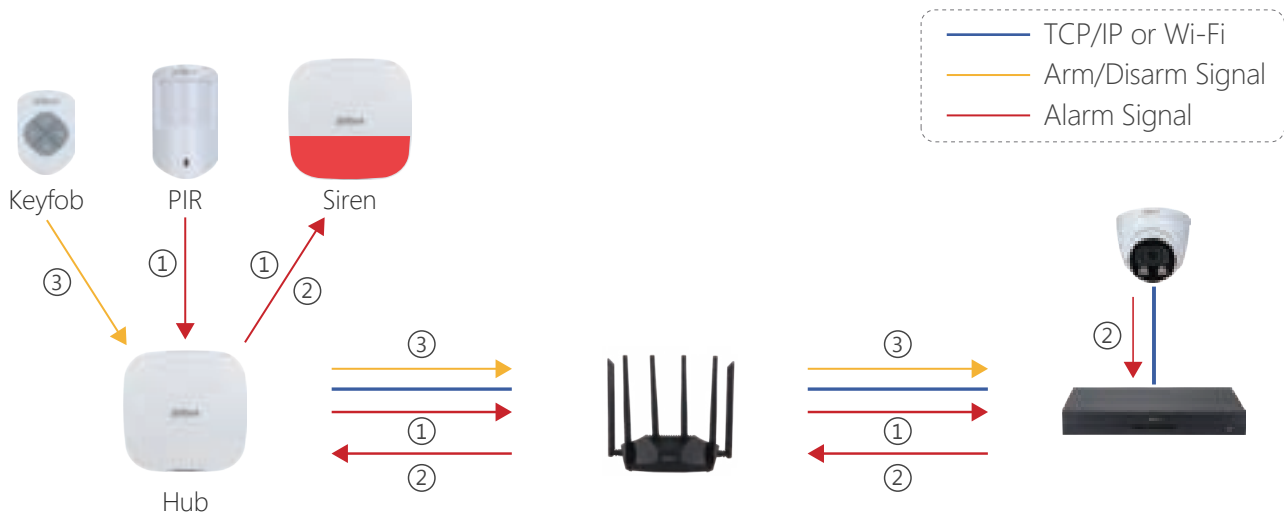
1 After the alarm Hub is added to the indoor monitor, the alarm system can be armed or disarmed, and the status information of each device of the alarm system can be viewed.

2 When a detector generates an alarm, the siren will be activated and relevant alarm information will be sent to the indoor monitor.



Interconnection with NVR/XVR

The Hub performs an information exchange with the NVR/XVR via the LAN without additional wiring, enabling multiple integration applications.



1 After the alarm Hub is added to the NVR and the integration rules are configured on the NVR (detector is linked to the video channel, and channel's intelligent alarm is linked to the siren), the siren will be activated and the corresponding video channel will start recording when the detector triggers the alarm.

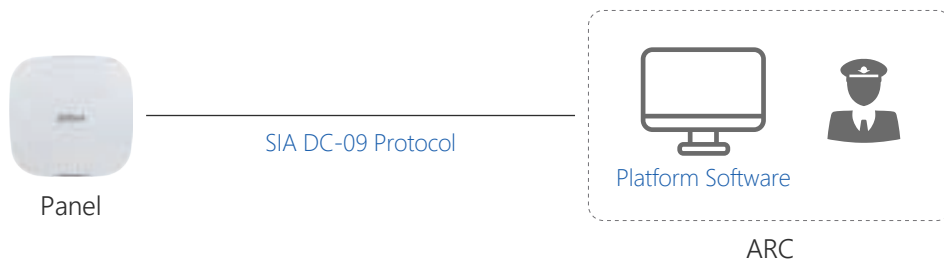
2 After the monitoring system's intelligent alarm event has been generated, the alarm signal will activate the siren according to the integration rules.

3 When the alarm system is armed or disarmed, the monitoring system will also enter the armed or disarmed status at the same time.



Integration with an ARC via SIA Protocol

SIA DC-09 is a standard protocol widely used in the alarm monitoring industry. Based on this protocol, different brands of control panels can be integrated with different platforms to enable functions such as event receiving, visual alarm verification, and remote arming and disarming.



Highlights

Simple

Almost no additional development is required to complete the integration.

Fast

Only a few steps of simple configuration are needed to integrate the device into the platform software.

Convenient

SIA protocol is an industry standard integration protocol, which is supported by most alarm monitoring software.

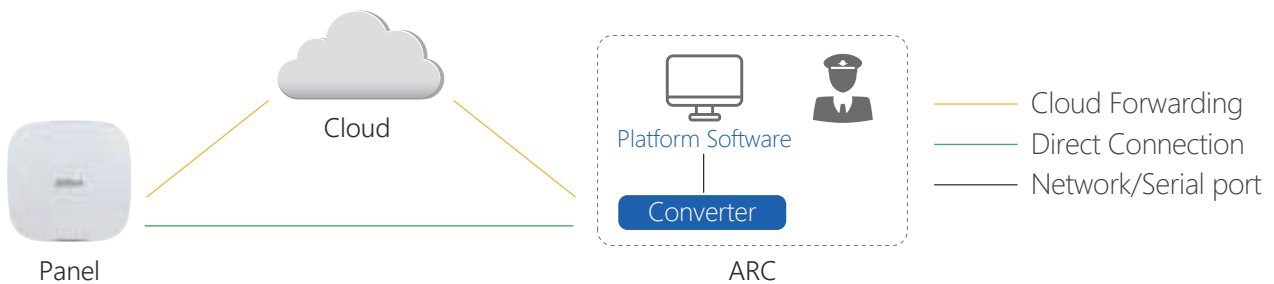
Scenarios

- The ARCs that have public static IP addresses and support mapping the internal service port to the external network.



Integration with an ARC via Converter

Converter is a software that forwards events generated by the Dahua security system to the ARC platform according to standard protocols such as SIA, Sur-Gard, or the private protocol of the platform itself.



Highlights

Hassle-free

All the panels and events are managed on the Converter. Staff in the ARC can configure event forwarding methods, protocols, and event types as needed, while the platform software only needs to receive, record, and process these events.

Compatible

In order to increase compatibility with more platforms, the Converter not only supports multiple standard protocols, but also supports customisation of private protocols for different platforms.

Connected

With the Converter, Dahua can display the ARC's information on the users/installers mobile app, making it easier for them to monitor their applications and allowing further business growth for them.

Scenarios

- The ARCs that do not want to be directly connected to the panel to avoid extra load on the platform.
- The ARCs that do not have a public static IP address.
- The ARCs that have public static IP addresses, but do not want to map the internal service port to the external network.



Driving Innovation to an **AIoT** Future

*AIoT is the convergence of Artificial Intelligence (AI) and the Internet of Things (IoT) where connected devices meet human interface. This is enabling unlimited possibilities through the integration of connected devices and security solutions.

**Compliant to PD 6662:2017 standard.*

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