

Distributed Controller (iTRT2)

- **Versatile:** variants for indoor and outdoor use
- **Compatibility:** support for OSDP and legacy Wiegand readers
- **Simplicity:** Different variants for ease of installation options
- **Interoperability:** compatible and integrated with Impro solutions

Distributed Controller For Scalable PACS solutions

WHO SHOULD USE THE iTRT2?

The range is ideal for most applications, whether new installations or retrofit.

PRODUCT BENEFITS:

- **Scalable controller options**
- **Versatile installation options**
- **Zero down-time firmware upgrades**
- **OSDP and Wiegand support**
- **Communication distance of 150m for Wiegand and 1000m for OSDP**
- **Offline validation**
- **Tamper protection**
- **Support for up to 2 doors with 4 inputs and 2 relay outputs.**
- **Auxiliary 3rd relay**

The Distributed Controller (iTRT) is a multifunction scalable controller.

It can be used as a door controller, an embedded Lite controller or full function system controller all at the flick of a switch.

It is equipped with 2 reader inputs which feature the latest secure OSDP interface protocol with 4 inputs and 3 controllable relays. These readers can be used for relaxed and full anti-pass (APB) access on a single door, or single entry on two doors. All inputs are also secure with end of line sensing (EOL). Legacy Wiegand readers are also supported.

Support for the RF transmitter and receivers has been maintained.

The two independent 10A single-pole, double throw (SPDT) relays allow for interfacing to door strikes, magnetic locks, and other 3rd party device such as alarm panels or lighting. An Auxiliary 3rd relay has been added for additional control and is currently reserved for future use on Access Portal software.



The iTRT can store up to 10k credentials and 100k buffered transactions per channel, whilst also providing offline validation

The iTRT is equipped with 22 LED diagnostic indicators which provides a comprehensive onsite interface, whilst the software allows for remote upgrading with zero down-time.

The product is available in two housing options, an ABS plastic housing (in production) or metal enclosure (in development) with built in integrated power supply (IPS) or PoE module. The PoE module is a Class 4 PoE injector.

Connectivity to the Access Portal system controller is achieved via RS-485 or ethernet. Access Portal Pro mode will allow the iTRT to handle up to 64 fixed addresses comprising of the onboard reader interfaces and the daisy-chained door controllers on the RS-485 bus.

Specifications

Distributed Controller (iTRT2)

| Model name | iTRT2 Plastic Module | iTRT2 w/ IPS Metal enclosure | iTRT2 w/ PoE (Future Development) | iTRT2 Plastic Enclosure |
|--|---|--|---|---|
| Part number(s) | HCD900 | HCD901/2/4 | HCD903 | HCD905 |
| Product description | iTRT2 Plastic Module (No PSU) | iTRT2 in steel enclosure with integrated PSU | iTRT2 in steel housing with PoE module | iTRT2 Plastic Enclosure (No PSU) |
| Colour | Grey | Black | Black | Grey module & B/W Enclosure |
| Dimensions (d-w-h) | 164mm x 140mm x 28mm | 8.2cm x 38.3cm x 31.3cm | 8.2cm x 38.3cm x 31.3cm | 100mm x 230mm x 260mm |
| Approximate product weight | 0.35kg | 3.60kg/3.60kg/4.10kg | 3.50kg | 1.15kg |
| Material | PC Plastic | Mild Steel housing | Mild Steel housing | PC Plastic Module in ABS Plastic Enclosure |
| Electrical Specifications | | | | |
| Input voltage | 12V | 100-230Vac | 802.15.4bt compliant | 12V |
| Power requirements at 12 VDC | 120mA | 120mA | 120mA | 120mA |
| Relays off | | | | |
| Relay power requirements at 12VDC | 0.45W/Relay | 0.45W/Relay | 0.45W/Relay | 0.45W/Relay |
| Power input protection | Reverse polarity and over- current protection | Reverse polarity and over- current protection | N/A | N/A |
| PoE Outputs | N/A | 3 monitored 12VDC aux o/p | 3 monitored 12VDC aux o/p | N/A |
| Interconnectivity | | | | |
| Ethernet | 10/100 Base-T | | | |
| RS-485 | 1 x 38400 RS-485 port for controller networking 1 x 38400 RS-485 port for Aperio™ wireless lock hubs | | | |
| OSDP & Wiegand | 2 hardware selectable ports for selection of OSDP and legacy Wiegand | | | |
| Status LED | 20 Status LED | | | |
| Input Specification | | | | |
| Digital Inputs | 2 x Door Open Sensor inputs and 2 x Request to Exit Button inputs | | | |
| Input Type | 4 dry contact inputs with end-of-line (EOL) sensing | | | |
| Output Specification | | | | |
| Number of relays outputs | 3 | | | |
| Output type | 3 x independent, single-pole, double-throw (SPDT) dry contact relays | | | |
| Relay contacts | Normally Open, Common, Normally Closed | | | |
| Contact ratings | 5A @ 28VDC (TV-5 Rated) 100k operations minimum | | | |
| Environmental specifications | | | | |
| Operating temperature | -25° to +60°C or -13° to +140°F | | | |
| Storage temperature | -40° to 85 °C or -40° to +176°F | | | |
| Operating humidity | 0 to 95% relative humidity non-condensing (at +40°C / +104°F) | | | |
| Environmental rating | IP10 | IP10 | IP10 | IP40 |
| Certifications | | | | |
| CE (EU) | ✓ | ✓ | ✓ | ✓ |
| UL | On request | On request | On request | On request |
| SABS (RSA) | ✓ | ✓ | ✓ | ✓ |
| RoHS | ✓ | ✓ | ✓ | ✓ |



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experience in the access
control industry

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