



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 (Future Development)	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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