



Changing to CO₂ refrigerant
We make it easy!



Next Generation CO₂ Control solutions

- Easy to use browser interface for commissioning and service (PC/Tablet/Mobile)
- Integrated LAN cloud connection and Wi-Fi hotspot
- Integrated power backup (UPS)
- Bus communication with Invertek inverter, full integration
- BMS interface
- System Manager Integrated - Navigate from one controller webpage to another

Secure Google hosted Cloud Solution



- Available for all Reftronix products
- Unlimited data storage
- Up to 5 sec data sample frequency
- Change log
- User management
- Graph with alarms
- Full controller access
- Alarm management

The optimum choice for
CO₂ refrigeration control



Next Generation Refrigeration Control



1. Condensing Unit Controller

- Two stage or single stage compressor
- Heat recovery
- Oil management
- Custom compressor map with compressor protection
- Two room controllers with EEV, thermostat, door, and defrost control

2. Chiller Controller

- DX chiller with one to five compressors with up to two inverters
- Flooded chiller with one to five compressors with up to two inverters
- Two user configurable thermostat controllers
- One user configurable PI controller
- Custom compressor map with compressor protection
- Freeze protection on both temperature and suction pressure

3. Pack Controller

- Up to 5 compressors for single suction group with up to two inverters
- Booster with max 4x2 compressors with up to four inverters
- Oil monitoring/safety
- Custom compressor map with compressor protection
- Two user configurable thermostat controllers
- One user configurable PI controller
- Heat Recovery

4. Room/Cabinet Controller

- Two room controllers with EEV, thermostat, door, and defrost control
- Two user configurable thermostat controllers
- One user configurable PI controller

Designed for ease of use

- Web interface for configuration
- Optimized for smartphone and tablet
- Integrated encrypted Reftronix cloud link

5. Heat Pump Controller

- High temperature air to water CO₂ heat pump
- Up to five compressors (Up to two inverter controlled)
- Optimized high pressure control
- Smart grid/load shedding (via cloud)

Specifications

Electrical

| | |
|--------------|--|
| Power Supply | 24 VAC ± 10% or 20 - 35 VDC or 100-265 VAC |
| Consumption | Max 40 VA @ 24 V and 30 VA @ 240 V |
| Power Backup | Super caps or external battery |

Analog Input

| | | |
|--------|-------------------------------------|--|
| Type | T1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12 | NTC temperature: 10 kΩ at 25°C, -50-90°C |
| | T4 | High NTC temperature: 50 kΩ at 25°C, 0-150°C |
| | P1, P2, P3, P4 | Ratio metric pressure sensor (0 - 5 V) or (4 - 20mA) |
| Number | | 16 |

Analog Outputs

| | |
|------------|------------|
| Type | 0 - 10 VDC |
| Number | 2 |
| Resolution | 8 Bit |
| Max Load | 20 mA |

Digital Inputs

| | |
|--------|---------------------------|
| Type | Dry contact, not isolated |
| Number | 6 |

Digital Outputs

| | |
|--------|---|
| Type | RL1, RL3, RL5, RL7: 16A @ max 250 VAC / 16 A @ max 24 VDC |
| Number | RL2, RL4, RL6: 6 A @ max 250 VAC / 6 A @ max 24 VDC |

Dimensions

| | |
|--------|--------|
| Height | 134 mm |
| Width | 241 mm |
| Depth | 46 mm |

Stepper Valves

| | |
|------------------|---------------------|
| Valve Type | Unipolar or bipolar |
| Number | 4 |
| Max current | 400 mA per coil |
| Max cable length | 50 meters |

Other

| | |
|-----------------|---|
| Storage | -30-60°C, 90% RH non-condensing |
| Operating | -20-60°C, 90% RH non-condensing |
| Protection | IP00 |
| Communication | 2 RS485 ports (+1 with option card) |
| | 1 Ethernet port |
| Real time clock | 1 Wi-Fi access point – 802.11 b/g/n |
| | With option card |
| Certifications | EMC directive 2014/30/EU, LVD directive 2014/35/EU, Product standard: EN 60730-1:2016 |

