

## DANTHERM REMOTE CLIMATE CONTROL MONITORING AND SURVEILLANCE

The Dantherm Remote Climate Control is a communication gateway and server solution providing connectivity to climate units at your Telecom site. The controller provides security of operation by means of surveillance and the ability to change settings remotely. Use the controller to create a real-time, exact and complete overview and control of your site climate conditions.

The Dantherm Remote Climate Control is designed specifically to control the Dantherm Telecom cooling units and is suitable for both new and existing sites. Even existing equipment can be monitored by the controller, using RS485-Modbus or the analogue input.

Individual site data is stored on a secure, redundant server capable of exchanging data to multiple server standards and web applications. The data retrieved can be used for real-time and historical analysis, to optimise cooling strategies.

The controller is designed for a variety of optional equipment ranging from fuel sensors to additional relays.

### FEATURES AND BENEFITS

#### **Benefits**

- Remote change of configurations and operational parameters
- Data history log for real-time and historical analysis
- Data saved on redundant servers
- Ability to tailor dashboard to own monitoring policy
- Alarm handling defined by user (SMS/E-mail alerts)
- Reduce service visits perform service only when needed
- Increase battery life by staying on top of temperatures in your BTS

#### Installation

- Secure access through firewalls
- True plug-and-play installation
- Requires no public or static IP numbers
- Eliminates complex VPN solutions
- On-board I/O and serial ports
- Available with GPRS or Ethernet communication

#### Cloud technology

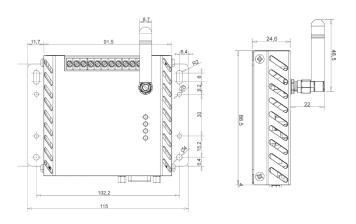
- No software installations software provided through The Cloud
- Instant access from any location and platform
- Designed for scalability
- Benefit from continuous improvements without software upgrades
- Easy integration with other tools and applications
- Reduces the need for large capital investments



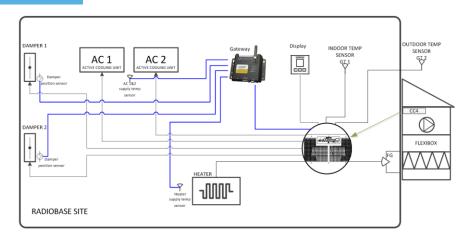
# TECHNICAL DATA GATEWAYS

Version	Unit	RCC GSM	RCC Ethernet
GPRS		Quad band GPRS Class 12 850/900/1800/1900 MHz	-
Ethernet		-	RJ45-10/100 Mbit/s
Relay (max 24V AC/DC, 1A)		1	1
Digital inputs (Insulated max 24V DC)		2	2
Analogue input		2 (PT100, 0-10V, 0-20mA)	-
Analogue output	0-10V DC	1	-
Data export format		Txt, xls, csv	Txt, xls, csv
Serial Port #1		RS232 up to 115.2 kbit/s	RS232 up to 115.2 kbit/s
Serial port #2 (Insulated)		RS485 up to 115.2kbit/s	RS485 up to 115.2kbit/s
Antenna		SMA Female	-
Protocols		Modbus-RTU	Modbus-RTU
Baud rates	Baud	300-115200	300-115200
Wall mounting		Yes (optional DIN)	Yes (optional DIN)
Dimensions	mm	92x115x25	92x115x25
Temperature range (Operation/Storage)		-30 to 65℃ / -40 to 85℃	-30 to 65℃ / -40 to 85℃
IP rating		IP20	IP20
Power supply	V DC	9-24 V DC	9-24 V DC
Power consumption	W	2	2
Alarm outputs		E-mail, SMS message	E-mail, SMS message
Certifications		CE, cUL, UL, FCC/IC, PTCRB	CE, cUL, UL, FCC/IC, PTCRB

### DIMENSIONS



### WIRING - SCHEMATICS





## TECHNICAL DATA SERVER

Visualise, monitor and control	The web-based user interface provides secure access for authorised users of field installations. By creating application-specific dash boards, field data from remote installations can be visually displayed and users are provided with full control of equipment parameters.		
Diagnostics and data trends	By analysing historical data and monitoring trends, it is possible to learn how equipment and devices perform in the field.  Visualised trends make it easy to analyse field data and spot deviations. For detailed analysis, data can be exported to tools such as Microsoft Excel or similar.		
Alarm management	Remote Climate Control provides instant information regarding both current and historical alarm status of each remote site.  Thresholds are configured and notifications distributed to the different users of the system via SMS message or e-mail, which allows monitoring of equipment health and system operation.		
Instant / scheduled reporting	The Remote Climate Control report manager provides professional report capabilities right at your fingertips.  Detailed reports based on pre-made templates can be generated instantly or scheduled directly to your inbox.		
Server-to-server linking	With the use of web services, field data can be linked into any web server, intranet, logistics system or other business system.  This powerful feature makes it possible to integrate field data with almost any system.		
User and project management	The project management system is an important tool for administration of equipment and users, as well as online storage and access for other project related files such as service reports, blueprints, or project documentation.		



