Dantherm[®] CONTROL YOUR CLIMATE



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 operation 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 per 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 any 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

	nther	mi						Electric	(12)
		_						riexit	xx 450
or brogendure	_				Value			_	rether
Allour Sumperature					28.2	-	_		
mid cosing					24.9				
					26	10			
and temperatures							et.)		
Inder angere	2	-	-	-			_	145	
2th	1049 1045-05 2020	711				~	-	1	~
201	Ring 04544 2010		145-0	2013-0	5-13 Q	201345-07		2112-42-07	Mile 343
Sector Sector Sector	Ring .			2013-0		- 1410		31(3-43-17	Mile Mile
20 20 20 20 20 20 20 20 20 20 20 20 20 2	Ring 04544 2010			14		1410	200	12.00	Nile 343 CC
25	Ring 04544 2010			14		1410		21(1)-(1)-(1) (1)-(1)- (1)-(1)-(1)-(1)-(1)-(1)-(1)-(1)-(1)-(1)-	and and a second
20 20 20 20 20 20 20 20 20 20 20 20 20 2	Ring O-15-64 29-55 Ring			14		1410		12.00	and and a second
2010 Orange Tamper 2011 Tamper	Florg 0-45-45 20 35 Rates		102 [1]	en alores tokin	a minima for the spin	1110 1119		Action	144 100 100 100 100 100 100 100 100 100
NUMBER TEMPER	Ren 0-0544 2015 2015 Ram 1 1 1		102 [1]	en alores tokin	a minima for the spin	1110 1119		Artist	144 (1997)
Notified Tamper 201 1 mms mes Mode Mode Con 1 (Linewer Kr) Con 2 (Happer Kr)	Rent 2) (5) (4) 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 2		102 [1]	543 mg 5m alarma 204 m	a la	1110 1119	Balan	Action Date 1 2013	
United tampes 201 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Rent D 4544 2022 Rent Rent Rent Rent Rent Rent Rent Rent		102 [1]	The states to a	C Immunities for the spin	1110 1110	Balan	Action Date 1 2013	
House server server Here Note Note Note Con 2 (2004) CO 1 (2004	Ent 0-15-14 2015 Ent 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		102 [1]	The states to a	C Immunities for the spin	1110 1110	Balan	IZ 60 Action Date 1 2010	
na seconda	Notes Notes 0:55:45 0 0:55:45 0 0:55:45 0 0:55:45 0 0:10:10 0 0:10:10 0 0:10:10 0 0:10:10 0 0:10:10 0 0:10:10 0 0:10:10 0 0:10:10 0		10 mar 10	na In Ang 11 I Ang 11 I Ang 11	0 1990 - 1990 - 1990 1990 - 1990 - 1990 1975 - 1990 - 1990 - 1990 1975 - 1990 - 1990 - 1990	1990 1999 1990 1990 1990 1990 1990 1990	Balan	12 00 Action Data 1 2013-1 2013-1 2013-1 2013-1	Paped 0420-01 0420-01 0420-01 04-
NUMBE STATES	Notes Notes Vietne 0 Vietne 0 Vietne 0 11 0 12 12 1 0 2 2		102 [1]	ne ne item to to f Aug 11 f Aug 11 f Aug 11 f Aug 11 f Aug 11	0 10 10 10 10 10 10 10 10 10 1	110 110 110 0 Max 210 0 Max 210	Balan	12 00 Action Date 1 2010 2010 2010 2010	Paped Magnet Magnet Magnet Marrisonal
ni United States 201 ministration ministrati	King King Video 0		10 mar 10	ne ne item to to f Aug 11 f Aug 11 f Aug 11 f Aug 11 f Aug 11	0 10 10 10 10 10 10 10 10 10 1	110 110 110 0 Max 210 0 Max 210	Balan	12 00 Artigo 2010 2010 2010 2010 2010 2010	444 444 444 444 444 444 444 444 444 44
ni United States 201 ministration ministrati	Bine 2) 05 45 45 12 20 20 20 20 20 20 20 20 20 20 20 20 20		10 mar 10	T Ag 21 T Ag 21 T Ag 21 T Ag 21 T Ag 21	0 1 Jan 1 Res. 5.000 Mar. 1 Res. 5.000 Mar. 1 Control 10 Control 10 2 Control 10	110 110 110 110 110 110 110 110 110 110	Balan	12 00 Action 2213 2213 2213 2213 2213 2213 2213 221	144 144 144 144 144 144 144 144
ni United States 201 ministration ministrati	King King Video 0		10 mar 10	T Ag 21 T Ag 21 T Ag 21 T Ag 21 T Ag 21	0 1 Jan 1 Res. 5.000 Mar. 1 Res. 5.000 Mar. 1 Control 10 Control 10 2 Control 10	110 110 110 110 110 110 110 110 110 110	Balan	13 00 Action 2014 2014 2014 2014 2014 2014 2014 2014	12.5 14.2
20 20 20 20 20 20 20 20 20 20 20 20 20 2	Bine 2) 05 45 45 12 20 20 20 20 20 20 20 20 20 20 20 20 20		10 mar 10	T Ag 21 T Ag 21 T Ag 21 T Ag 21 T Ag 21	0 1 Jan 1 Res. 5.000 Mar. 1 Res. 5.000 Mar. 1 Control 10 Control 10 2 Control 10	110 110 110 110 110 110 110 110 110 110	Balan	13 00 Action 2014 2014 2014 2014 2014 2014 2014 2014	12.5 14.2
ni United States 201 ministration ministrati	Bine 2) 05 45 45 12 20 20 20 20 20 20 20 20 20 20 20 20 20		10 mar 10	T Ag 21 T Ag 21 T Ag 21 T Ag 21 T Ag 21	0 10 10 10 10 10 10 10 10 10 1	110 110 110 110 110 110 110 110 110 110	Balan	UL 00 Artigen 2013 2013 2014 2014 2015 2015 2015 2015 2015 2015 2015 2015	144 144 144 144 144 144 144 144

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 (Isolated 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 (Isolated)		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	E-mail, SMS
Certifications		CE, cUL, UL, FCC/IC, PTCRB	CE, cUL, UL, FCC/IC, PTCRB

DIMENSIONS



WIRING - SCHEMATICS



Dantherm® CONTROL YOUR CLIMATE

TECHNICAL DATA

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 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 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.



All systems Rap			Lingbed In: Mada Frederiks Account: Daving
100 w ertres			K
ming 3 to 15 of 15 engines			WHICH IS NOT
office 0 Alarm status			Seetch
R OX	599260020A ATM Kornwestheim-mitte		Fest Petrona 1 Next Las
a ox	510260039 Forstand	Project	
8 Box	510260039 Forstenried-Combo Cooling 10000 Versailles-Bourgues Telecom	All	diant Hancos Data Roman Dava
* • 05w	Könlaslutter		Alarm Hallocal Data, Brands Data
a ex	DK Combo cooler test	Bouypues Telecom	Alem Handballings Brown Devel
1 0 a	DK-testrig 1	Cepelec	Allown Ministerior and Allowing
* •m.	Test Sheltor - Skive	Dantherm - Skive	Alarm Minternal Data Roomin, Daries
	Bell Canada FlexiBox 400 w/ CC4	Dantherm - Skive	farm Hannas Della Branne Devila
	E-Plus Herten - Germany	Dantherm - Skive	Alarm Handol Data Roma Data
	Stuttgert_Combo Cooling	Dancharm US	Date: Electrical Data Broom Conte
	Mediation testsite	LP _U	count Cistorical Data Stronte Data
· Oherest Auro	Nextel Combo 10 page	Germany Sample site	CORDER HISTORICAL Data Between Co.
-	Bextel Flexibles March	Megafon	Historical Outa Britanti Com
	Telcel Hexibox Mexico City - Mexico Telcel Hexibox Mexico City - Mexico	Necol	CORDER PERSONAL Data Research In
and a 1 to 11 of 11 miles	Telcel Hexiliox NSN - Mexico City	Nextal	Hannikal Data Bonna B
	Mexico City	Telal	Contraction Contraction Dates Binner
		Telos	Clearly Date &
and the second se			Alexa Manarical Data Brannet, Davies
			Free Design Derive
			Free Proyents [1] Mart Lar