

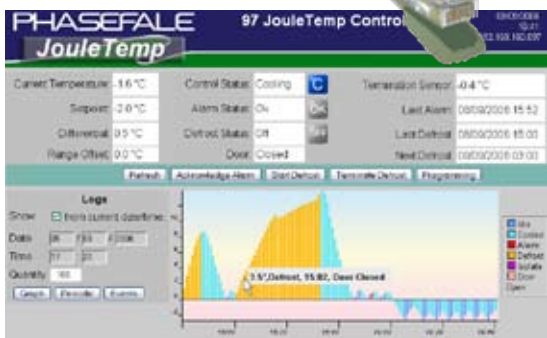
Joule Temp - Cooling, Heating & Humidity Control & Monitoring for Rooms with Browser based interface



The JouleTemp represents a new concept in Room controls - full cool room control, alarm and monitoring functions in a standalone control with Ethernet communications via your computers Web browser. Can be used with [JouleConnect](#) management software for multiple controllers. JouleTemp includes 2 Stages of Cooling (with defrost), 2 Stage Heating plus 2 Stage Humidity* Control.

JouleTemp Features:

- Cooling, Heating & Humidity* Control
- High Precision temperature sensor included reading (0.1°C accuracy)
- Real time clock with battery
- Time/Date stamped data logging (up to 5 points)
- PID control option
- Ethernet Port & free Modbus TCP
- Designed and Manufactured in Australia to international standards
- Alarm buzzer on board.
- Major upgrade for TACm installations
- Straight, tilt and Panel Mount options
- Door Monitor and Alarm
- -80°C Sensor option for Cryogenic Fridges.



- No software to instal- Browser based
- Status Colour coded temperature graphing
- Event log tracks alarms
- Password protected programming
- Import/Export setup text file.



JouleTemp is ideal for HACCP food safety programs

* humidity additional cost option



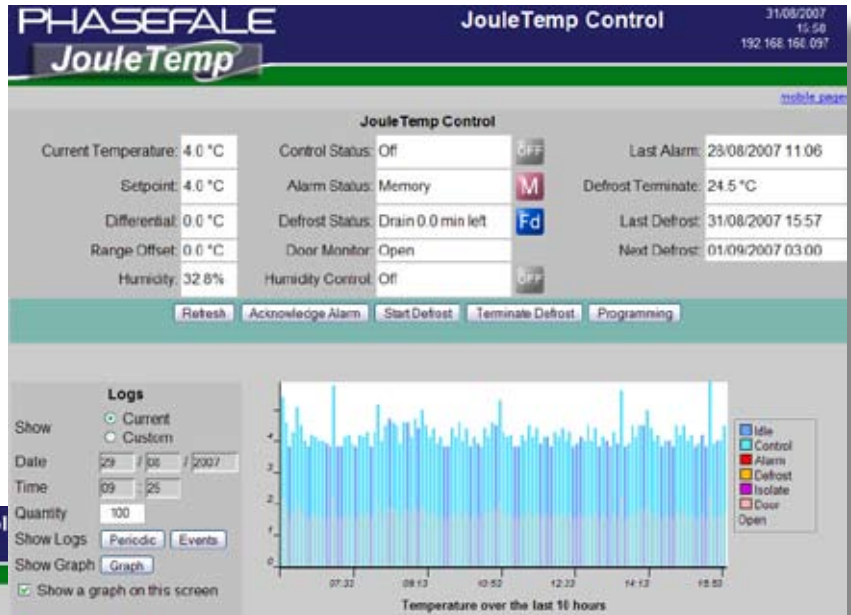
CONTROL

MONITOR

PROTECT

JouleTemp software...

The main screen shows Temperature, Control, Alarm and defrost status. The automatic Graph is color coded to quickly recognize control and alarms etc. Status icons are animated.



Normal Settings

- Setpoint (SP): 4.0 °C
- Differential (di): 0.0 °C
- Alarm High (AH): 17.0 °C
- Alarm Low (AL): -1.0 °C
- Alarm Delay (At): 30.0 min
- Defrosts Per Day (nd): 6
- Defrost Duration (dd): 30.0 min

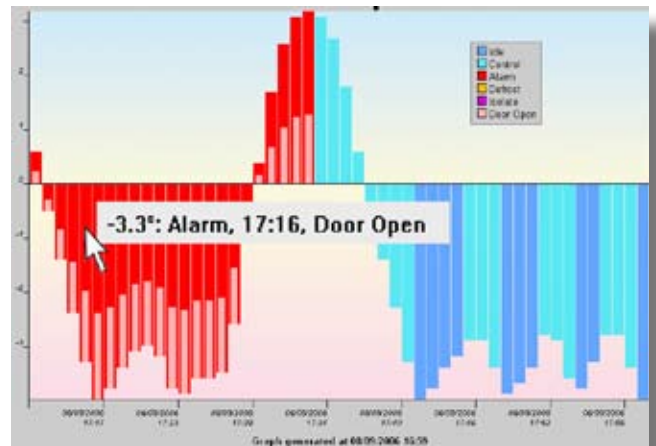
AA1 Settings

- Alarm Ack (AA): 14.0 min
- Limit Start (LS): 4.0 min
- Setpoint 2 (SP2): 5.0 °C
- Terminate Setpoint (Tr): 5.0 °C
- Operating Mode: Cooling
- Drain Delay (dt): 1.0 min
- Fan Delay (Ft): 1.0 min
- Defrost Mode: Electric
- S2 Input Function: Terminate
- Defrost Temperature: Show
- Defrost Start 1 (S1): 3.0 Hours
- Defrost Start 2 (S2): 7.0 Hours
- Defrost Start 3 (S3): 11.0 Hours
- Defrost Start 4 (S4): 15.0 Hours
- Defrost Start 5 (S5): 19.0 Hours
- Defrost Start 6 (S6): 23.0 Hours
- Defrost Start 7 (S7): 23.0 Hours
- Defrost Start 8 (S8): 23.0 Hours
- Defrost Start 9 (S9): 23.0 Hours
- Defrost Start 10 (S10): 23.0 Hours
- Defrost Start 11 (S11): 23.0 Hours
- Defrost Start 12 (S12): 23.0 Hours
- Sensor Calibration (CA): 0.0 °C

General Settings

- Main Description: JouleTemp Control
- Sensor 2 Description: Defrost Terminate
- Sensor 7 Description: Id Sensor
- Admin Password: pass
- Events to Email: None
- Send to Email Address: hary_p@hotmail.com
- SMTP Server: mail.refrigam.com
- Server Requires Authentication:
- Account: alarm@refrigam.com
- Password: alarm

One of three programming screens each password protected where settings are viewed and or changed.



Specifying a graph by time & date plus duration is easy. The graph includes colour coded status plus door open or close and a mouse hover display of the point.

Date	Time	Event	Temperature	Temp 2	Humidity	Temp 3	Alarm
24/08/2007	16:13:50	Door Monitor (DOR) Changed	-0.2 °C	27.1 °C	34.4%	42.3 °C	Off
24/08/2007	16:13:31	S7 Name Changed	-0.2 °C	27.1 °C	34.4%	42.3 °C	Off
24/08/2007	16:13:30	S2 Name Changed	-0.2 °C	27.1 °C	34.4%	42.3 °C	Off
24/08/2007	14:15:15	Humidity Calibrate Low Changed	1.3 °C	27.0 °C	35.4%	42.2 °C	Off
20/08/2007	14:03:24	Terminate Setpoint (Tr) Changed	5.1 °C	26.7 °C	35.6%	42.2 °C	Off
20/08/2007	14:02:44	Setpoint (SP) Changed	4.8 °C	26.6 °C	35.6%	42.1 °C	Off
20/08/2007	14:02:24	Defrost Initiated	4.7 °C	26.6 °C	35.6%	42.2 °C	Off
20/08/2007	13:53:45	Defrost Duration (dd) Changed	4.4 °C	26.9 °C	35.6%	42.1 °C	Off

The event logs provide exception reporting and also record general status at the time of the log. Periodic logs provide data which can be exported to Excel.

JouleTemp can also transmit alarms & events via email/SMS* (*SMS via email requires paid service)

