

# Microclimate Thermal System

MTS

**COBHAM**

The most important thing we build is trust



MTU

Cobham's new Microclimate Thermal System (MTS), based on the highly successful mass fielded microclimate cooling system (MCS) breaks new ground by offering heating as well as cooling at the flip of a switch.

This new heating feature can be retrofitted into an existing microclimate cooling unit. The Microclimate Thermal Unit uses the same mounting tray, umbilical, vest, control by-pass assembly and power cable as the MCS.



Microclimate Thermal System

## Key Features

- Heating and Cooling modes
- Rugged, reliable, easy to operate
- User-adjustable heating and cooling
- Can be used with existing vests, mounting trays, umbilicals, CBAs and power cables

## Nominal Specifications

### Cooling Mode Characteristics

Cooling Power	350 Watts at	
	125 deg F (cooling)	(52 deg C)
Thermal Fluid Temperature	55 to 75 deg F	(13 to 24 deg C)
	(depending on user adjustment)	
Operational Temperature Range	55 to 150 deg F	(13 to 66 deg C)

### Heating Mode Characteristics

Heating Power	250 Watts at 0 deg F (heating)	
Thermal Fluid Temperature	90 to 110 deg F	(32 to 43 deg C)
	(depending on user adjustment)	
Operational Temperature Range	0 to 90 deg F	(-18 to 32 deg C)

### Electrical Characteristics

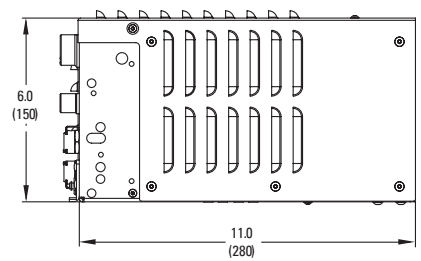
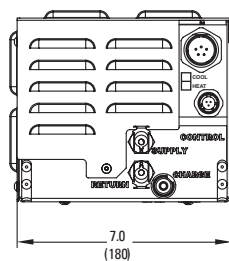
Voltage	28 VDC
Current	12 Amps (max) at 28 VDC
Electrical Specifications	MIL-STD-461, MIL-STD-704, MIL-STD-1275

### Mechanical Characteristics

Thermal Fluid	50-50 Water-Propylene Glycol Mix
Thermal Fluid Flow Rate	8-14 GPH
MTU Weight	13 lbs (5.9 kg)

### Mechanical Characteristics continued

Non-Operating (Storage) Temperature Range	-65 to 160 deg F (-54 to 71 deg C)
Mechanical Specifications	MIL-STD-810 (consult factory)
Humidity	MIL-STD-810
Altitude	MIL-STD-810
Shock	MIL-STD-810
Vibration	MIL-STD-810
Crash Safety	MIL-STD-810
Blowing Sand, Dust and Rain	MIL-STD-810
Product Interfaces	
Power Connector	MIL-DTL-D38999/24WD5PN
Control Connector	MIL-DTL-D38999/26WA98PN



Cobham Microclimate Thermal Unit

For further information please contact:

**Cobham Life Support**  
10 Cobham Drive  
Orchard Park, NY 14127 USA

Tel: +1 (716) 662 0006  
Fax: +1 (716) 662 0747