11 Specifications

General

Measurement Input:	Temperature and humidity, with plug-in external sensor Removable for remote location (up to six feet)

Temperature

Range:	2° to 120°F, –17° to 49°C
Accuracy:	±1°C
Sensor:	Solid State
Response Time:	5 minutes for 63% step change
Display Resolution:	1°F/1°C

Humidity

Range:	2% to 98% RH
Accuracy:	±3% @ 25°C, between 20% and 90% of range; ±5% below 20%, above 90% @25°C
Sensor:	Resistive polymer
Response Time:	5 minutes for a 30% to 80% step change
Display Resolution:	1% RH

Display

Types:	2½ digit backlit LCD, 0.5" high; low battery and parameter indication
Display Modes	User-switchable between °F°,°C and %RH for continuous display; max/min storage for both temperature and humidity

Electronics

Type:	Microprocessor-controlled and linearized HI & LO Peak Hold for both temperature and humidity; re-initializes position at every chart change (every time door is opened)

Chart Paper

Type:	8 inch (200mm) circular, double-sided, with linear radial divisions; 1, 7 and 32 day with both °F and °C scales

Chart Drive

Type:	Stepper Motor
Ranges:	1, 7, 32 day; switchable
Accuracy:	1% of rotation
Chart Paper Hold Down:	Magnetic hub lock

Recording Pens

Type:	Disposable fiber-tip; red for temperature, blue for humidity

Pen Drive

Type:	Motorized linear screw drive
Deadband:	1°F, 1% RH
Zero:	Automatic zero during chart change or power interruption
Pen Arms:	Clear plastic to allow full chart viewing
Pen Lift:	Automatic upon door opening; pens are door mounted and lift away from the chart whenever the door opens.

Alarms

Alarms:	User-selectable for high or low temperature and humidity
Audible Alarm:	Integral piezo-electric beeper
Alarm Relay Contacts:	2A 110Vac, 2A 30Vdc, Normally Open, Single Pole, Single Throw (SPST)

Operating Conditions (Recorder)

Temperature:	32° to 120°F (0° to 49°C)
Humidity:	0% to 90% RH, non-condensing

Operating Conditions (Remote Sensor)

Temperature:	2° to 120°F (-17° to 49°C)
Humidity:	2% to 98% (should not be operated continuously in condensing conditions)

Power (Recorder)

dc:	Four (4) "D" size alkaline batteries; greater than 1 month continuous operation in 32 day mode; bulbs will not light on battery power. Recommended battery type: Duracell Type MN1300 "D" size batteries for best performance at low temperatures.
ac:	110Vac or 220Vac 50/60 Hz stepped down to nominal 9Vdc using ac adaptor provided
Power Requirements:	300 mA "normal" during pen movement for battery (dc power); 500 mA "normal" during pen movement for ac power using ac adaptor. (Note: The light bulbs draw 200 mA of current).
ac Power Jack Voltage:	8.3 to 12.4 Vdc, (nominal 9Vdc) 1A max. An ac adaptor is supplied

Analog Voltage Input Adapter (Optional)

Input:	20 mV dc to 1200 mV dc records as 2° to 120°F
Input Protection:	up to 20Vdc or 10Vac RMS
Input Impedance:	330k ohms minimum
Input Connections:	Banana jacks, 0.75" spacing
Cable Length:	12" (30.5cm)

Mechanical

Dimensions: (H x W x D)	13 3/16" x 10 1/16" x 2 5/8" (33.5 x 27.1 x 6.7 cm)
Weight:	Approx. 7 lbs, including alkaline batteries
Mounting:	"Keyhole" slots for wall mounting; foot cover for benchtop use
Case:	Rugged ABS plastic, color: gray or white
Miscellaneous:	Swing-out stabilizing arm for bench top use, decorative foot cover for wall mounting, and 6 ft remote sensor cable for remote sensing (USE ONLY ONE 6 FT REMOTE SENSOR CABLE PER RECORDER FOR ACCURATE READINGS)

NOTE

The CT485B Chart Recorder may be susceptible to radio frequency fields at selected frequencies. The reading error can be up to 10% of reading (Both Temperature and Humidity) when exposed to RF fields (Testing was performed to,IEC1000-4-3, 80% AM Modulation).