Microprocessor-Based Temperature/Relative Humidity Recorder

CT485B Series

£444

Basic Unit includes 120 double sided charts

Shown smaller than actual size

For additional features and models, please consult sales or visit omega.co.uk

- **Available in Computer Room White or Charcoal Grey**
- **Versatile Remote Mounting Sensor**
- **Convenient Front Panel Programming**
- **200 mm Chart for 1, 7, or 32-Day Recording**
- **Fully Electronic Microprocessor Control**
- **Benchtop or Wall Mounted**
- **Alarm Contact Standard**
- **1,2,3 Year Extended Warranty Comes with Extra Pens, Paper, Batteries**
- **Sensors Not Recommended for Use in a Corrosive Environment**
- **Companion Pressure and pH Recorder Available**

Complete with 120 Assorted Double-Sided Charts, 2 Sets of Pens, 1.8 m Remote Sensor Cable, Wall Mounting Kit, Cal-Lock Kit, Batteries, and ac Adaptor

Covered by U.S. and international patents and pending applications

The new Model CT485B completely self-contained temperature/relative humidity recorder is microprocessor based to accurately measure, indicate and record temperature and relative humidity.

This rugged unit comes standard with alarms. They contain a single, integral relay contact which closes in response to an alarm condition. Simultaneous high and low alarm points for temperature and relative humidity are user selectable. When the current conditions exceed any of the preset values, the 2 Amp relay contact closes and an audible alarm sounds.

Flipping open a hinged front panel door permits access to the power switch and controlling functions of the recorder. The door comes with a locking mechanism. The user may select 1, 7 or 32 day operation, program the instrument to recording °C or °F, and access alarm and calibration controls or max/min functions.

A separate 3-position switch next to the digital display selects a °C,°F or %RH readout. The chart drive is stepper controlled for precision, and a unique magnetic retaining knob eliminates the possibility of paper tear.

Calibration of alarm models is digital, and a user may make calibration adjustments in the field using the convenient panel pushbuttons. An optional calibration lockout cover prevents unauthorised changing of calibration codes. A stabilising arm provides added stability for benchtop use. The arm conveniently rotates under the unit for wall mounting. Recessed rear mounting slots and a wall template enable easy wall mounting. A decorative cover for the stabilising arm is supplied for wall mount use. A standard 110 or 220 Vac (depending on model ordered) power adaptor is supplied for continuous long-term operation, along with four D-cell batteries for backup power or field use. Each unit includes 1.8 m of cable for remotely mounting the sensor. A sensor holder clip is provided.

Units come standard with two chart light bulbs. When using the ac power adaptor, these bulbs provide easy viewing of the chart in dimly lit conditions. A switch is provided to allow the chart lights to be turned on or off.

OMEGACARE℠ extended warranty programme is available for this model. Ask your sales representative for full details when placing an order. OMEGACARE℠ covers parts, labour and equipment loan unit.

Specifications

Measurement Inputs: Temperature and humidity, with plug-in external sensor, removable for remote location, 2 m (6') extension cable included; 0.02 to 1.20 Vdc signal with voltage input adaptor

TEMPERATURE
Range: -17 to 49°C (2 to 120°F)
Accuracy: ±1°C
Sensor: Solid state
Response Time: 5 minutes for 63% step change
Display Resolution: 1°C/1°F, backlit LCD

HUMIDITY
Range: 2 to 98% RH
Accuracy: ±3% @25°C, between 20 and 90% of range (±5% below 20% and above 90% @25°C)
Sensor: Resistive polymer. Not recommended for use in corrosive air environments
Response Time: 5 minutes for a 30 to 80% step change
Display Resolution: 1% RH 2 1/42 digit LCD, backlit, 12.7 mm (0.5") high; low battery
Display Modes: Front panel switchable between °C, °F and %RH for continuous digital display; max/min storage for both temperature and humidity or flashing to indicate alarm condition

ELECTRONICS
Type: Microprocessor-controlled and linearised high and low peak hold for both temperature and humidity, re-initializes position at every chart change

CHART
Type: 203 mm (8") circular, linear radial divisions, double sided; 1, 7 and 32 days, °C and °F scales

CHART DRIVE
Type: Stepper motor
Ranges: 1, 7 and 32 day, selectable
Accuracy: 1% of rotation
Chart Hold Down: magnetic hub lock

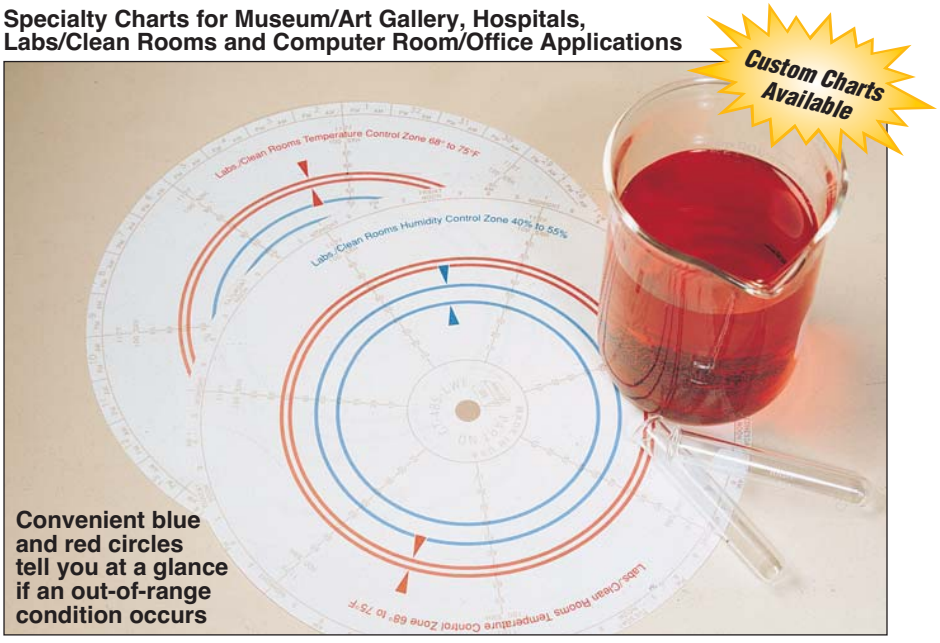
RECORDING PENS
Type: Disposable fiber tip, red for temperature, blue for humidity

PEN DRIVES
Type: Motorized linear screw drive
Deadband: 1°F, 1% RH
Zero: Automatic zero during chart change or power interruption
Penlift: Automatic on door opening; pens are door mounted and swing clear of the chart when door opens
Pen Arms: Clear plastic to allow full chart viewing

Available in computer room white or charcoal grey.

CE labeled 220 Vac model shown with included ferrite core noise suppressor (included on CE models)

Specialty Charts for Museum/Art Gallery, Hospitals, Labs/Clean Rooms and Computer Room/Office Applications



Convenient blue and red circles tell you at a glance if an out-of-range condition occurs

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

OPERATING CONDITIONS (SENSOR REMOTE)
Sensors not recommended for use in a corrosive environment
Temperature: -17 to 49°C (2 to 120°F)
Humidity: 0 to 98% RH

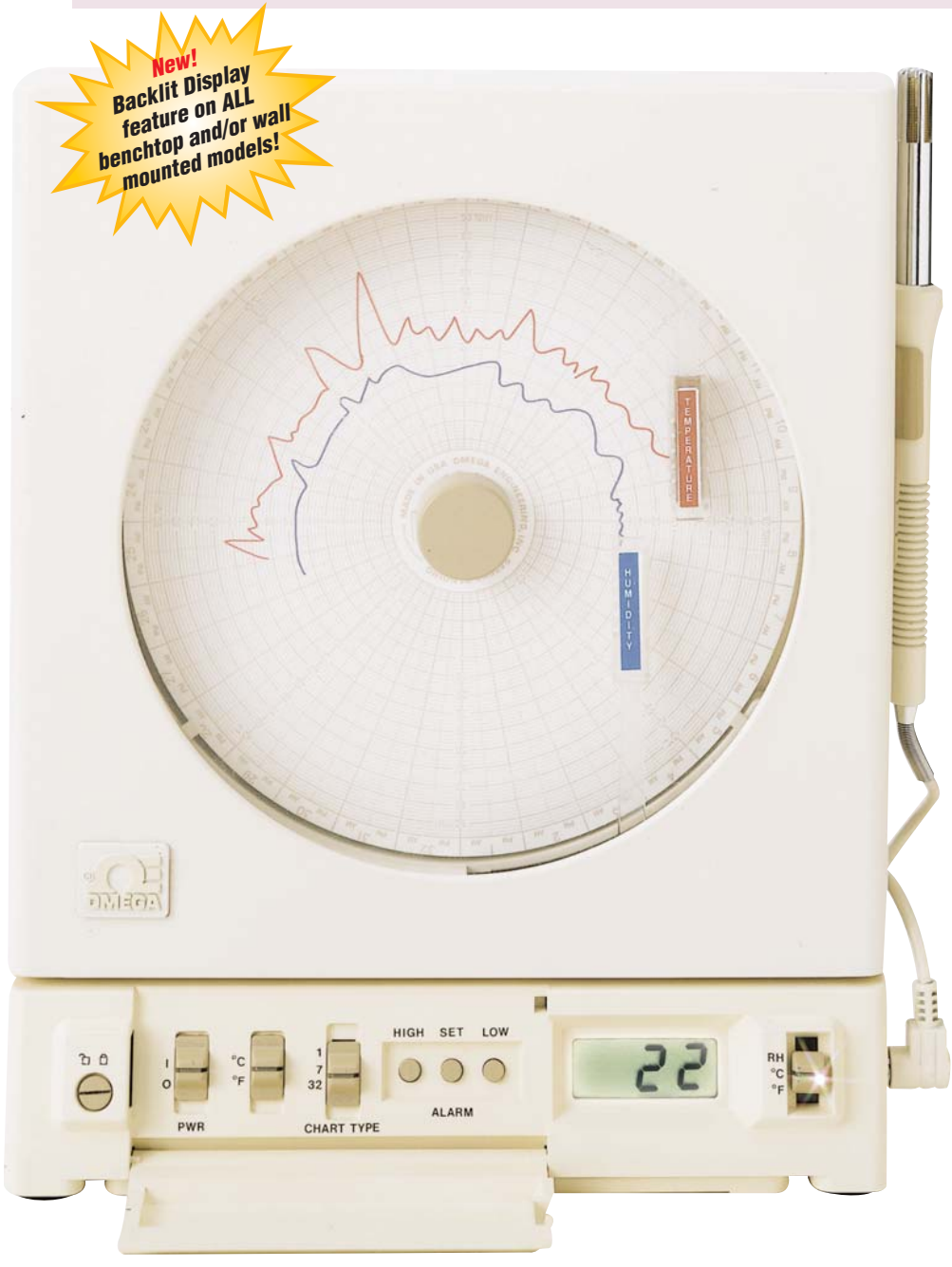
ALARMS
Alarms: User-selectable for high or low temperature and humidity
Audible Alarm: Integral piezoelectric beeper
Alarm Relay Contacts:
1 Amp, 30 Vdc normally open, single pole, single throw (SPST)

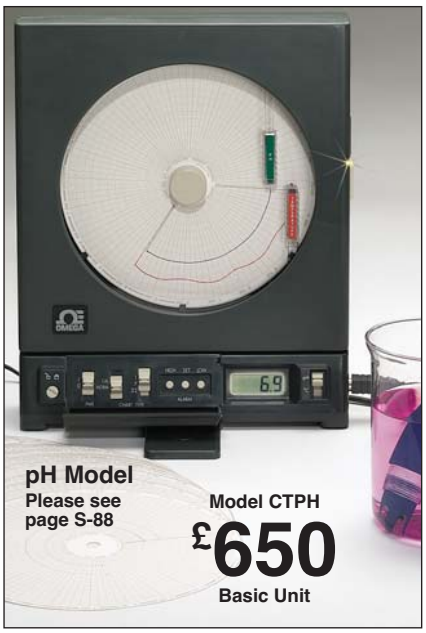
Power (Recorder): Four D cells batteries (included) and 9 Vdc/110, 50/60 Hz power adaptor (supplied); 220 Vac power adaptor supplied where applicable
Battery Life: more than 1 month continuous operation in 32-day mode (average conditions)
Power Requirements: 300 mA "normal" during pen movement for battery (dc) power; 500 mA "normal" during pen movement for ac power using ac adaptor with chart lights on
Note: the light bulbs drain 200 mA of current
DC Power Jack Voltage:
8.3 to 12.4 Vdc (nominal 9 Vdc), 1 Amp max.

MECHANICAL
Dimensions: 33.5 H x 27.1 W x 6.7 cm D (13 3/16 x 10 11/16 x 2 5/8")
Weight: Approx. 3.2 kg (7 lb) including batteries
Mounting: "Keyhole" slots for wall mounting; foot cover for benchtop use
Case: Rugged ABS plastic

ANALOGUE VOLTAGE INPUT ADAPTOR
Input: 20 mVdc to 1200 mVdc records as -17 to 49°C, (2 to 120°F) input protection up to 20 Vdc or 10 Vac RMS
Input Impedance: 330 Kohms min.
Input Connections: Banana jacks, 19 mm (0.75") spacing
Cable Length: 305 mm (12")

For Companion Recorders, Please see omega.co.uk





ALL MODELS AVAILABLE FOR FAST DELIVERY!

To Order *(Specify Model Number)*

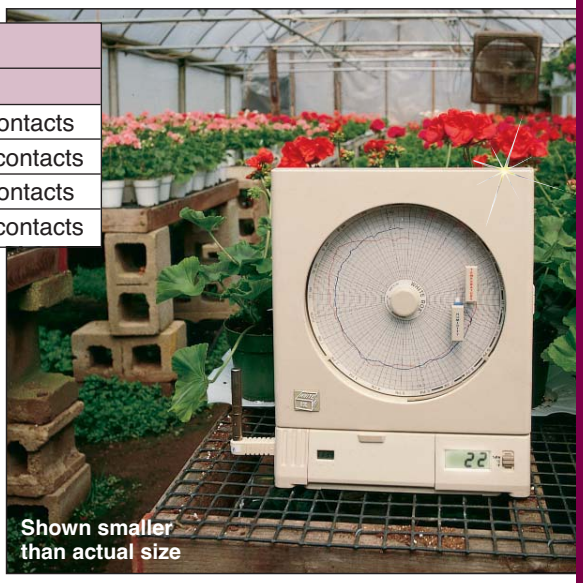
Model Number	Price	Description
CT485B-220V-G-AL	£444	Grey, 110 Vac, with alarms and relay contacts
CT485B-220V-W-AL	449	White, 110 Vac, with alarms and relay contacts
CT485B-110V-G-AL*	444	Grey, 220 Vac, with alarms and relay contacts
CT485B-110V-W-AL*	449	White, 220 Vac, with alarms and relay contacts

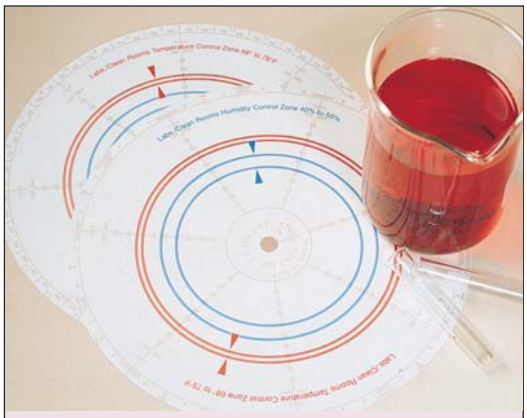
**110 Vac models are not CE compliant*

Comes with complete operator's manual, batteries, ac adaptor, assorted charts, pen set, remote sensor cable, and wall mounting kit.

Ordering Example: CT485B-220V-W-AL,** CE labeled white recorder with alarms and relay contacts, 220 V, with 120 double sided charts (£449), and **CT485-CWC,** package of 100, 7 day, °C (celsius) temperature measurement charts (£12.75), £449 + 12.75 = **£461.75.

OCW-3** OMEGACARE℠ extends standard 1-year warranty to a total of 4 years (£112), £449 + 112 = **£561.





Charts **–Each Unit Includes:**
120 Double-Sided Charts FREE!
(20 each of 1-day, °F; 1-day, °C; 7-day, °F; 7-day, °C; 32-day, °F; 32-day °C).
Additional charts can be ordered below as 1 pack of 100 or 6 packs of 100

Model No.	Price	Description
CT485-CDF	£12.75	100 Charts, 1 day am/pm, °F
CT485-CDC	12.75	100 Charts, 1 day am/pm, °C
CT485-C24F	6.70	20 Charts, 24 hour clock, °F
CT485-C24C	6.70	20 Charts, 24 hour clock, °C
CT485-CWF	12.75	100 Charts, 7 day, °F
CT485-CWC	12.75	100 Charts, 7 day, °C
CT485-CMF	12.75	100 Charts, 32 day, °F
CT485-CMC	12.75	100 Charts, 32 day, °C
CT485-CSP	12.75	120 Charts, 20 of each style
CT485-CDF-6	59.00	600 Charts, 1 day, °F
CT485-CDC-6	59.00	600 Charts, 1 day, °C
CT485-CWF-6	59.00	600 Charts, 7 day, °F
CT485-CWC-6	59.00	600 Charts, 7 day, °C
CT485-CMF-6	59.00	600 Charts, 32 day, °F
CT485-CMC-6	59.00	600 Charts, 32 day, °C

***Note:** all charts are double sided.*
***Ordering Example: CT485-CWC-6** package of 600 double sided charts, 7 days, with °C (celsius) temperature measurements, **£59.00**.*

Custom Charts Available

Specialty Paper
(All double-sided, packages of 20 charts)

Model Number	Price	Description
CT485-MW(*)	£13.50	Museums/art galleries, 7 days (in °C or °F) 18.3 to 22.2 (65 to 72°F), 40 to 50% RH
CT485-MM(*)	13.50	Museums/art galleries, 32 days (in °C or °F) 18.3 to 22.2°C (65 to 72°F), 40 to 50% RH
CT485-HW(*)	13.50	Hospitals, 7 days (in °C or °F) 20 to 23.3°C (68 to 74°F), 40 to 50% RH
CT485-HM(*)	13.50	Hospitals, 32 days (in °C or °F) 20 to 23.3°C (68 to 74°F), 40 to 50% RH
CT485-LW(*)	13.50	Lab, clean rooms, 7 days (in °C or °F) 20 to 23.9°C (68 to 75°F), 40 to 55% RH
CT485-LM(*)	13.50	Lab, clean rooms, 32 days (in °C or °F) 20 to 23.9°C (68 to 75°F), 40 to 55% RH
CT485-PW(*)	13.50	Computer rooms/offices, 7 days (in °C or °F) 18.3 to 23.9°C (65 to 75°F), 45 to 60% RH
CT485-PM(*)	13.50	Computer rooms/offices, 32 days (in °C or °F) 18.3 to 23.9°C (65 to 75°F), 45 to 60% RH
CT485-WMC	13.50	Wine storage 32 days, 10 to 15.6°C, 60 to 70% RH
CT485-WMF	13.50	Wine storage 32 days, 50 to 60°F, 60 to 70% RH

**Insert C (for °C) or F (for °F)*
***Ordering Example: CT485-MWC** specialty paper for museums and art galleries, 7 days, with °C (celsius) temperature measurements, **£13.50**.*

Accessories

Model Number	Price	Description
CT485-CABLE-6W	£16.00	2 m (6') remote sensor cable, white
CT485-CABLE-6G	16.00	2 m (6') remote sensor cable, grey
CT485B-CAL-LABEL	3.40	Calibration lockout cover labels (sheet of 10)
CT485B-CLIP-KIT	3.40	Sensor clip kit
CT485-AMV-W	15.00	Analogue voltage input adaptor (cable), white
CT485-AMV-G	15.00	Analogue voltage input adaptor (cable), grey
CT485-PS	6.70	Pen set, red and blue, package of 1 each
CT485-PS-6	35.00	Pen set, red and blue, package of 6 each
CT485B-CAL-KIT	50.00	Calibration kit
CAL-3-HU	60.00	Traceable Calibration Certificate
CT485B-RP-W	54.00	White replacement probe
CT485B-RP-G	54.00	Gray replacement probe

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