

Термометры цифровые DELTA OHM HD32.2, HD32.2A

Технические характеристики

Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06

Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Казахстан (772)734-952-31

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Таджикистан (992)427-82-92-69

Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

Единый адрес для всех регионов: dmh@nt-rt.ru || www.deltaohm.nt-rt.ru

HD32.2 is designed for WBGT (Wet Bulb Globe thermometer temperature) index analysis in presence or absence of solar radiation.

The instrument is provided with three inputs for probes with SICRAM module: the probes have an electric circuit that communicates with the instrument; the sensor calibration data are saved in its permanent memory.

All the SICRAM probes can be inserted in one of the inputs: they are automatically recognized when you switch the instrument on.

The main features of the instrument are:

- Logging: acquisition and memorization of data inside the instrument. Memory capacity: 64 different logging sections, with the possibility to set the acquisition interval of the samples. You can set the duration of the memorization and, with auto-start function; it's possible to set the starting and finishing date and the hour of data memorization.
- The measurement unit of the temperature visualized sizes: °C, °F, °K.
- The system date and hour.
- The visualization of the maximum, minimum and medium statistic parameters and their cancellation.
- The transfer speed of the data through the serial port RS232.

NOTE: The set acquisition interval is the same for all the probes connected to the instrument.

HD32.2 instrument can contemporarily detect the following sizes:

- Globe thermometer temperature T_g .
- Wet bulb with natural ventilation temperature T_n .
- Ambient temperature T .

On the basis of the detected measurements, HD32.2 can calculate:

- WBGT(in) index (Wet Bulb Glob Temperature: wet bulb and globe thermometer temperature) in presence or absence of solar irradiation.
- WBGT(out) index (Wet Bulb Glob Temperature: wet bulb and globe thermometer temperature) in presence of solar irradiation.

Operating manual

WBGT index

HD32.2, HD32.2A



TECHNICAL CHARACTERISTICS

Instrument

Dimensions (Length x Width x Height)	185x90x40 mm
Weight	470 g (complete of batteries)
Materials	ABS, rubber
Display	Dot matrix with backlight 160x160 points, visible area 52x42mm

Working conditions

Operative temperature	-5 ... 50°C
Storage temperature	-25 ... 65°C
Humidity relative to work	0 ... 90% HR no condensation

Protection degree

IP64

Instrument uncertainty

± 1 digit @ 20°C

Power supply

Net power supply (code SWD10)	12Vdc/1A
Batteries	4 batteries 1.5V AA type
Autonomy	200 hours with 1800mAh alkaline batteries
Absorbed current with switched instrument off	< 45µA

Safety of the memorized data

unlimited

TP3207.2, TP3207 temperature probe

Sensor type:	Thin film Pt100
Accuracy:	Class 1/3 DIN
Measurement range:	-40 ÷ 100 °C
Resolution:	0.1°C
Drifting in temperature @20°C:	0.003%/°C
Drifting after 1 year:	0.1°C/year
Connection:	4 wires plus SICRAM module
Connector:	8 – poles female DIN45326
Cable:	Only TP3207 (2m)
Dimensions:	Ø=14 mm L= 150 mm (TP3207.2), L= 140 mm (TP3207)
Response time T ₉₅ :	15 minutes

Globe thermometer probe Ø=50 mm TP3276.2, Ø=150 mm TP3275

Sensor type:	Pt100
Accuracy:	Class 1/3 DIN
Measurement range:	-10 ÷ 100 °C
Resolution:	0.1°C
Drifting in temperature @20°C:	0.003%/°C
Drifting after 1 year:	0.1°C/year
Connection:	4 wires plus SICRAM module
Connector:	8 – poles female DIN45326
Cable:	Only TP3275 (2m)
Stem dimensions:	Ø=8 mm L= 170 mm (TP3276.2), Ø=14 mm L= 110 mm (TP3275)
Response time T ₉₅ :	15 minutes

HP3201.2, HP3201 Natural ventilation wet bulb probe

Sensor type:	Pt100
Accuracy:	Class A
Measurement range:	4 °C ÷ 80 °C
Resolution:	0.1°C
Drifting in temperature @20°C:	0.003%/°C
Drifting after 1 year:	0.1°C/year
Connection:	4 wires plus SICRAM module
Connector:	8 – poles female DIN45326
Cable:	Only HP3201 (2m)
Stem dimensions:	Ø=14 mm L= 170 mm (HP3201.2), L= 110 mm (HP3201)
Cotton wick length:	about 10 cm.
Tank capacity:	15 cc.
Tank autonomy:	96 hours with RH=50%, t = 23°C
Response time T ₉₅ :	15 minutes

TP3204S Natural ventilation wet bulb probe

Sensor type:	Pt100
Accuracy:	Class A
Measurement range:	4 °C ÷ 80 °C
Resolution:	0.1°C
Drifting in temperature @20°C:	0.003%/°C
Drifting after 1 year:	0.1°C/year
Connection:	4 wires plus SICRAM module
Connector:	8 – poles female DIN45326
Cable:	2 m
Dimensions:	L x W x H=140 x 65 x 178.5 mm (reservoir + bottle)
Scotch length:	about 10 cm
Tank capacity:	500 cc
Tank autonomy:	15 days @ t = 40 °C
Response time T ₉₅ :	15 minutes

Connections

Inputs for probes with SICRAM module 3 male 8-pole DIN 45326 connectors

Serial interface:

Pin:	M12-8 poles.
Type:	RS232C (EIA/TIA574) or USB 1.1 o 2.0 not isolated
Baud rate:	from 1200 to 38400 baud. with USB baud=460800
Data Bit:	8
Parity:	None
Stop bit:	1
Flow control:	Xon-Xoff
Cable length:	max 15m

Memory

divided in 64 blocks.

Memory capacity

67600 memorizations for each of 3 inputs

Архангельск (8182)63-90-72	Ижевск (3412)26-03-58	Магнитогорск (3519)55-03-13	Пермь (342)205-81-47	Сургут (3462)77-98-35
Астана (7172)727-132	Иркутск (395)279-98-46	Москва (495)268-04-70	Ростов-на-Дону (863)308-18-15	Тверь (4822)63-31-35
Астрахань (8512)99-46-04	Казань (843)206-01-48	Мурманск (8152)59-64-93	Рязань (4912)46-61-64	Томск (3822)98-41-53
Барнаул (3852)73-04-60	Калининград (4012)72-03-81	Набережные Челны (8552)20-53-41	Самара (846)206-03-16	Тула (4872)74-02-29
Белгород (4722)40-23-64	Калуга (4842)92-23-67	Нижний Новгород (831)429-08-12	Санкт-Петербург (812)309-46-40	Тюмень (3452)66-21-18
Брянск (4832)59-03-52	Кемерово (3842)65-04-62	Новокузнецк (3843)20-46-81	Саратов (845)249-38-78	Ульяновск (8422)24-23-59
Владивосток (423)249-28-31	Киров (8332)68-02-04	Новосибирск (383)227-86-73	Севастополь (8692)22-31-93	Уфа (347)229-48-12
Волгоград (844)278-03-48	Краснодар (861)203-40-90	Омск (3812)21-46-40	Симферополь (3652)67-13-56	Хабаровск (4212)92-98-04
Вологда (8172)26-41-59	Красноярск (391)204-63-61	Орел (4862)44-53-42	Смоленск (4812)29-41-54	Челябинск (351)202-03-61
Воронеж (473)204-51-73	Курск (4712)77-13-04	Оренбург (3532)37-68-04	Сочи (862)225-72-31	Череповец (8202)49-02-64
Екатеринбург (343)384-55-89	Липецк (4742)52-20-81	Пенза (8412)22-31-16	Ставрополь (8652)20-65-13	Ярославль (4852)69-52-93
Иваново (4932)77-34-06	Лиргизия (996)312-96-26-47	Казахстан (772)734-952-31	Таджикистан (992)427-82-92-69	

Единый адрес для всех регионов: dmh@nt-rt.ru || www.deltaohm.nt-rt.ru