

Датчики осадков DELTA OHM HD2013.3

Технические характеристики

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

Precipitation Detector

HD2013.3

○ DETECTION OF ALL TYPE OF PRECIPITATION

Rain - Snow - Hail

Capacity value changes according to the surface dampened by raindrops

○ IDENTIFICATION OF PRECIPITATION INTENSITY

It detects from light to heavy rain
detect **rate intensity**

Light | Moderate | Heavy | Torrential

○ MADE TO OPERATE UNDER ANY CONDITION

Extended operating range up to -40 °C

Heater and **temperature sensor** to melt snow and detect snow precipitation

○ ACCURATE AND RELIABLE SYSTEM

Using a unique **self-calibrating algorithm**: dirt on the surface will not influence the readings

○ GREAT FLEXIBILITY

Integrating in any installation

○ NO MAINTENANCE

Auto-calibration to improve sensitivity and compensate the sensor aging and dirt



Ideal for applications in any
Meteo system

Environmental Monitoring
Building Automation
Green Houses
Road Installations

Measuring rain intensity without maintenance

The **RELIABLE** and **ACCURATE** solution where optical rain sensors fail. Delta OHM introduces a renewed and advanced version of the HD2013.2 rain detector. This detector has been in our range for years as one of the most reliable and successful products. To make sure that the sensor is even more simple to integrate in any outdoor installation or configuration, we now have enhanced the possibilities to connect: we supply this version in Modbus-RTU or 4-20mA or 0-10V or contact output.

Our standard features:

- capacitive element is shielded from wind by the protecting dome construction: no false indications
- capacitive element is heated to be able to detect any form of precipitation, including snow and hail
- can be standard equipped with bird-spikes
- supplied with heavy duty mounting bracket, universal for surface or pole mounting
- standard cable lengths 5 or 10 meter

Technical Specification

PRECIPITATION SENSOR

Type	Capacitive, with integrated heater
Dimensions	6.6 cm ²
Angle	30°
Sensitive area	0.05 cm ² min.

TEMPERATURE SENSOR

Sensor	NTC 10KΩ @ 25 °C
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MEASURING RANGE

Precipitation detection	ON / OFF (precipitation in progress / no precipitation) Percentage of dry sensitive surface of the sensor
Temperature	-40...+60 °C

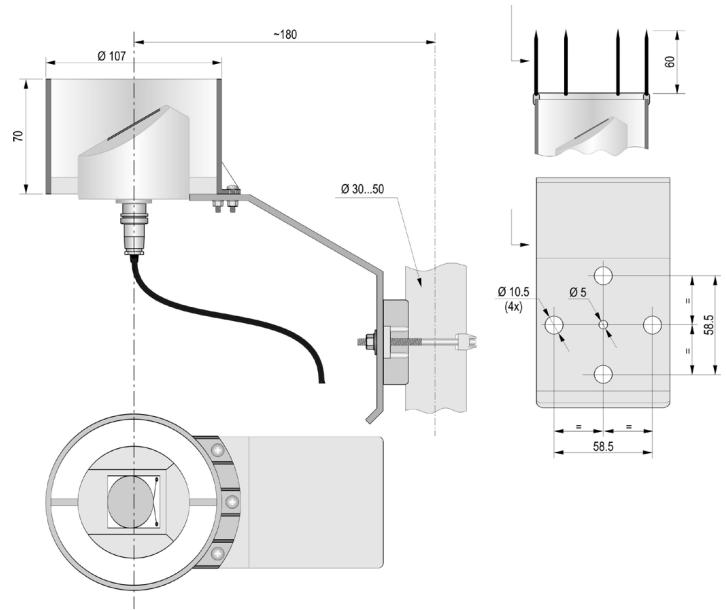
RESOLUTION

Precipitation detection	Configurable 1 % (default) or 0.1 % of dry sensitive surface of the sensor
Temperature	0.1 °C

GENERAL FEATURES

Output	<ul style="list-style-type: none"> RS485 not isolated, with MODBUS RTU or proprietary protocol Analog 0/4...20 mA ($R_{Lmax} = 500\Omega$) or on request 0...10 V ($R_{Lmin} = 10\text{ k}\Omega$) Voltage-free normally open contact max. 200 mA @ 30 Vdc resistive load
Power Supply	12...30 Vdc
Consumption	With heating OFF: 18 mA @24 Vdc With heating ON: 230 mA max @24 Vdc The indicated consumption does not include the consumption due to the possible analog output
Connection	8-pole circular connector
Operating conditions	-40...+60 °C / 0...100 %RH
Storage temperature	-40...+60 °C
Dimensions	Ø 70 x 70 mm (only instrument)
Weight	450 g approx.
Protection degree	IP 68
Housing material	Technopolymer ASA

Dimensions



Ordering Codes

HD2013.3 Rainfall/snowfall detector. IP68. RS485 output with MODBUS-RTU or proprietary protocol, 0/4...20 mA (0...10 V on request when ordering) analog output and voltage-free contact output.

Supplied with mounting bracket and 8-pole watertight female free connector.

Bird spikes (optional) and CP2013.2...cable have to be ordered separately.

HD2013.2D Bird spikes (6 spikes $\varnothing 3$ mm, height 60 mm). To be requested when ordering the instrument.

CP2013.2.5 Cable with 8-pole watertight connector on one end, free wires on the other end. Length 5 m.

CP2013.2.10 Cable with 8-pole watertight connector on one end, free wires on the other end. Length 10 m.

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