

DM650HM BATTERY POWERED HUMIDITY/TEMPERATURE DISPLAY

- > %RH, TEMPERATURE, DEW POINT, DELTA T
- > ALARM RELAY / USER SET DISPLAY MESSAGING
- > USB AND NFC INTERFACE
- > BATTERY POWERED
- > 5000 POINT DATA LOGGER

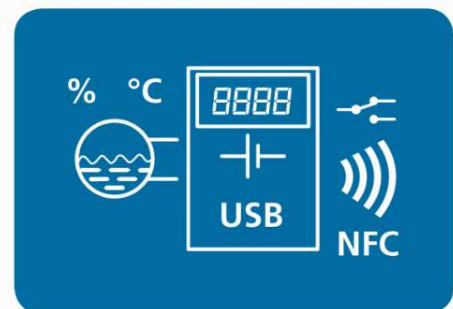
> INTRODUCTION

The DM650HM is a battery powered indicator with built-in sensors designed to display % relative humidity, temperature, dew point and delta temperature, on a 6-digit LCD display.

The instrument offers an advanced display mode allowing the user to display not only process variables but one or two (1 - 32) character messages. This feature is further enhanced by the ability to split a process range into eight user-set bands, each band having independent user-selected messages.

The DM650HM has a changeover type relay with multiple programmable options

Wall and duct mounted versions are available.



> FEATURE HIGHLIGHTS

RELAY

The instrument is equipped with single volt-free change-over type relay. The user may select one of several actions including deviation operation, with fully adjustable set point and dead-band. An option is provided to trigger an alert event when a relay contact is on.

The relay can be used to alarm on any of the values of relative humidity, temperature, dewpoint or delta temperature. A battery monitoring function is also provided.

DATA LOGGING FUNCTION

DM650HM also provides a powerful data logging function. The log points can be set up to 5000 points, each point is time and date stamped together with %RH, temperature and relay state information.

The log rate is selectable in steps. The start of log can be delayed if required. Either fixed or rolling logs may be performed.

Two methods of reading the log are available. The USB configuration reads the log and allows the user to save to a text file. The NFC android interface allows data transfer to android phones or tablets, and using the downloadable App, the data can be graphed and forwarded by email, Bluetooth etc. The NFC interface is also capable of starting a new log with different log periods and modes.

FLEXIBLE DISPLAY OPTIONS

The DM650HM can display any combination of the following process variables, % relative humidity, temperature, dew point and delta temperature.

REAL TIME CLOCK

Date and time can also be displayed with the input values. The real-time clock is used to record the data logged points.

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SPECIFICATIONS

INPUT SENSOR		SPECIFICATIONS @20 °C
Range + Options	Accuracy	Stability / notes
% Relative humidity (%RH) nominal (0 to 100) %RH	Typically, ± 3 %RH (max ± 5 %RH) between (10 to 90) %RH	Thermal stability 0.01 % / °C
Temperature (-30 to 100) °C	± 0.5 °C between (-20 to 80) °C	Thermal stability 0.1 °C / °C
Dew point		Mathematically derived from %RH and temperature
Delta temperature		
To maintain full accuracy annual calibration is required contact support@status.co.uk for details		

DISPLAY	
Type / options / function	Description
Display height	7.9 mm non-backlit
Display information options some information is displayed scrolling *1	6 digits 14 segment input value plus “Warning”, “Transmit”, “NFC”, “USB”, icons, 8 segment log volume/signal indicators. Date and time. Custom messages for visual alarms/information. Relay condition.
Display range	Full range for %RH and temperature (0 to 50) °C for dew point and delta temperature
Decimal place	To 1 place for %RH, temperature, dew point and delta temperature
High intensity LED	Alarm and warning options
*1 Below -5 °C ambient temperatures scrolling messages are not practical due to the update speed of the LCD display. Below this use basic mode only.	

RELAY	
Type / options / function	Description
Type	Single pole change-over (common, N/o, N/c)
Rating	48 VDC maximum @ 1 A (5 mA minimum) 28 VAC RMS maximum @ 1 A

USB CONFIGURATION USER INTERFACE		
Type/ options/ function	Description	Notes
Configuration hardware	USB mini B port	A to mini B cable required
Configuration software	USBSpeedLink	Download www.status.co.uk
Operating system	Microsoft Windows	Win 7 or later
Configuration	Decimal point Temperature units	Adjustable °C, °F
Display configuration	Display mode	Basic and advanced
Pre-set sensor to setpoint mA	Locks display values	For diagnostics
Basic display mode	Display any value %RH, temperature, dew point, delta temperature Bar graph as % log fill and alert LED options	
Advanced display mode *1	Process value and or message A, B (32 character) and or alert LED flash. Update every 5 seconds/alternates between message A and B	
Display Pre-set display messages	Seven custom messages Eight user adjustable temperature bands	Message A and message B options
LED alert	Eight user adjustable temperature bands	Alert LED flash
Warning symbol	Out of range	Warning symbol will flash on
Battery monitor	Alert LED plus message	Relay option