

# testo Saveris Components: Wireless probes

Probe versions with internal and external temperature and humidity sensors easily adapt to any application. Wireless probes are available with or without display. Current measurement data, battery status and signal strength are shown in the display. In the event of a transmission interruption data is saved in the probes' memory.

| Temperature Probes                                                                                   |                                                                                                                 |                                                                                                                                    |                                                                                                                  |                                                                                                                   |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
|                                                                                                      | Saveris T1                                                                                                      | Saveris T2                                                                                                                         | Saveris T3                                                                                                       | Saveris Pt                                                                                                        |
| <b>Wireless</b><br> | <b>NTC</b><br><b>internal</b>  | <b>NTC</b><br><b>internal</b><br><b>external</b>  | <b>TC</b><br><b>external</b>  | <b>RTD</b><br><b>external</b>  |
|                                                                                                      | Wireless probe with internal NTC sensor                                                                         | Wireless probe with external probe connection and internal NTC sensor, plus door contact input                                     | 2-channel wireless probe with 2 external thermocouple probe connections                                          | Wireless probe with 1 external Pt100 probe connection                                                             |
| Probe type                                                                                           | NTC                                                                                                             | NTC                                                                                                                                |                                                                                                                  |                                                                                                                   |
| Meas. range                                                                                          | -22 to 122 °F                                                                                                   | -22 to 122 °F                                                                                                                      |                                                                                                                  |                                                                                                                   |
| Accuracy                                                                                             | ±0.7 °F (-13 to 122 °F)<br>±1.4 °F (remaining range)                                                            | ±0.7 °F (-13 to 122 °F)<br>±1.4 °F (remaining range)                                                                               |                                                                                                                  |                                                                                                                   |
| Resolution                                                                                           | 0.1 °C / °F                                                                                                     | 0.1 °C / °F                                                                                                                        |                                                                                                                  |                                                                                                                   |
| Probe type                                                                                           |                                                                                                                 | NTC                                                                                                                                | TC type K: -329 to +2462 °F<br>TC type J: -148 to +1382 °F                                                       | RTD                                                                                                               |
| Meas. range (Instrument)                                                                             |                                                                                                                 | -58 to 302 °F                                                                                                                      | TC type T: -325 to +752 °F<br>TC type S: 32 to +3200 °F                                                          | -328 to 1112 °F                                                                                                   |
| Accuracy (Instrument)                                                                                |                                                                                                                 | ±0.4 °F (-13 to 158 °F)<br>±0.7 °F (remaining range)                                                                               | ±0.9 °F or 0.5% of rdg                                                                                           | at 77 °F<br>±0.2 °F (32 to 140 °F)<br>±0.4 °F (-148 to 392 °F)<br>±0.9 °F (remaining range)                       |
| Resolution (Instrument)                                                                              |                                                                                                                 | 0.1 °F/°C                                                                                                                          | 0.1 °F/°C / TC type S 1 0.1 °F/°C                                                                                | 0.1 0.1 °F/°C                                                                                                     |
| Conn.                                                                                                |                                                                                                                 | NTC via mini-DIN socket, door contact connection cable included in delivery (5.9')                                                 | 2 TCs via standard mini plug (max. difference in potential 2 V)                                                  | 1 Pt100 via mini-DIN socket                                                                                       |
| 2.4 GHz                                                                                              | Version without display                                                                                         | Saveris T1<br>Part no. 0572 1250                                                                                                   | Saveris T2<br>Part no. 0572 1251                                                                                 | Saveris T3<br>Part no. 0572 9252                                                                                  |
|                                                                                                      | Version with display                                                                                            | Saveris T1 D<br>Part no. 0572 1260                                                                                                 | Saveris T2 D<br>Part no. 0572 1261                                                                               | Saveris T3 D<br>Part no. 0572 9262                                                                                |

## Technical data

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|------------------------|---------------------------------------------------------------------------------------------------------------|
| Dimensions (housing):  | 3.2 x 3.4 x 1.5" (3.2 x 3.4 x 1.5")                                                                           |
| Weight                 | Approx. 7.7 oz. (240 g)                                                                                       |
| Battery life           |                                                                                                               |
| (Type: 4 AA batteries) | Battery life at 77 °F, 3 years; for freezer applications, 3 years with L91 Photo lithium Energizer batteries) |
| Material/Housing       | Plastic                                                                                                       |
| Protection class       | Saveris T1 & T2: IP68, Saveris T3: IP54, Saveris Pt 100: IP68                                                 |
| Wireless frequency     | 2.4 GHz                                                                                                       |
| Measuring rate         | Standard 15 min, 1 min to 24 h can be set                                                                     |

|                           |                                                                                                             |
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| Conformity with standards | DIN EN 12830                                                                                                |
| Oper. temp.               | Saveris T1 & T2: -31 to +122 °F<br>Saveris T3 & Pt100: -4 to +122 °F                                        |
| Storage temp.             | -40 to +122 °F (-40 to 50 °F)                                                                               |
| Display (optional)        | LCD, 2 lines; 7-segment with symbols                                                                        |
| Transmission distance     | approx. 984.3' free field at a frequency of 868 MHz,<br>approx. 328.1' free field at a frequency of 2.4 GHz |
| Wall bracket              | included                                                                                                    |

Alkali manganese batteries AA (0515 0414) are included (analog coupler excluded). Saveris probes are delivered with a certificate of conformance from the factory. NIST or ISO calibration certificates must be ordered separately.

| Humidity and Temperature                                                                                         |                         |                                                                                   |                                    |                                                                                   |                                                          |                                                                                     | Analog                                                                                                                                                                                                      |                                                                                     |
|------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------|------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                                                  | Saveris H2D             |                                                                                   | Saveris H3                         |                                                                                   | Saveris H4D                                              |                                                                                     | Saveris U1                                                                                                                                                                                                  |                                                                                     |
| <div>Wireless</div> <div></div> | %RH                     |  | %RH                                |  | %RH                                                      |  | mA                                                                                                                                                                                                          |  |
|                                                                                                                  | NTC                     |                                                                                   | NTC                                |                                                                                   | NTC                                                      |                                                                                     | V                                                                                                                                                                                                           |                                                                                     |
|                                                                                                                  | external                |                                                                                   | internal                           |                                                                                   | external                                                 |                                                                                     |                                                                                                                                                                                                             |                                                                                     |
|                                                                                                                  | Wireless humidity probe |                                                                                   | Humidity wireless probe            |                                                                                   | Wireless probe with 1 external humidity probe connection |                                                                                     | (Analog coupler) - Wireless probe with current/voltage input                                                                                                                                                |                                                                                     |
| Probe type                                                                                                       | NTC                     | Humidity Sensor                                                                   | NTC                                | Humidity Sensor                                                                   | NTC                                                      | Humidity Sensor                                                                     | 1 channel: current/voltage input                                                                                                                                                                            |                                                                                     |
| Meas. range                                                                                                      | -20 to 50 °F            | 0 to +100 %RH*                                                                    | -4 to +122 °F                      | 0 to 100 %RH                                                                      | -20 to 50 °F                                             | 0 to +100 %RH*                                                                      | 2-wire: 4 to 20 mA, 4-wire: 0/4 to 20 mA, 0 to 1/5/10 V, load: max. 160 at 24 V DC                                                                                                                          |                                                                                     |
| Accuracy                                                                                                         | ±0.9 °F                 | to 90 %RH: ±2 %RH<br>> 90 %RH: ±3 %RH                                             | ±0.9 °F                            | ±3 %RH                                                                            | ±0.4 °F                                                  | see probes                                                                          | Current ±0.03 mA / 0.75 µA<br>Voltage 0 to 1 V ±1.5 rdg/39 µV<br>Voltage 0 to 5 V ±7.5 rdg / 0.17 rdg<br>Voltage 0 to 10 V ±15 rdg / 0.34 rdg<br>±0.02% of. m.v./K deviating from nominal temperature 72 °F |                                                                                     |
| Resolution                                                                                                       | 0.1 °F/°C               | 0.1 °F/°C/0.1 °F/°C td                                                            | 0.1 °F/°C                          | 0.1 °F/°C/0.1 °F/°C td                                                            | 0.1 °F/°C                                                | 0.1 °F/°C/0.1 °F/°C td                                                              |                                                                                                                                                                                                             |                                                                                     |
| Conn.                                                                                                            | fixed external probe    |                                                                                   |                                    |                                                                                   | 1 x external humidity probe mini DIN socket              |                                                                                     | 2 or 4-wire current/voltage input                                                                                                                                                                           |                                                                                     |
|                                                                                                                  |                         |                                                                                   |                                    |                                                                                   |                                                          |                                                                                     | Service interface mini DIN for adjustment                                                                                                                                                                   |                                                                                     |
| 2.4 GHz                                                                                                          | Version without display |                                                                                   | Saveris H3<br>Part no. 0572 6250   |                                                                                   |                                                          |                                                                                     | Saveris U1<br>Part no. 0572 3250                                                                                                                                                                            |                                                                                     |
|                                                                                                                  | Version with display    | Saveris H2D<br>Part no. 0572 6262                                                 | Saveris H3 D<br>Part no. 0572 6260 |                                                                                   | Saveris H4D<br>Part no. 0572 6264                        |                                                                                     |                                                                                                                                                                                                             |                                                                                     |

#### Technical data

|                                        |                                                                                                                                                                                                                |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions (housing)                   | Saveris H2D: 3.4 x 3.9 x 1.5 in<br>Saveris H3 & H4D: 3.1 x 3.3 x 1.5 in<br>Saveris U1: Approx. 3.4 x 3.9 x 1.5 in                                                                                              |
| Weight                                 | Saveris H2D: Approx. 8.2 oz<br>Saveris H3 & H4D: Approx. 7.9 oz<br>Saveris U1: Approx 7.7 oz                                                                                                                   |
| Battery life<br>(Type: 4 AA batteries) | Saveris H2D, H3 & H4D: Battery life at 77 °F, 3 years; for freezer applications, 3 years with L91 Photo lithium Energizer batteries)<br>Saveris U1: Supply: AC power supply 6.3 V DC, 2 to 30 V DC max 25 V AC |
| Material/Housing                       | Plastic                                                                                                                                                                                                        |
| Protection class                       | Saveris H2D: IP54,<br>Saveris H3: IP42,<br>Saveris H4D & U1: IP54                                                                                                                                              |

|                       |                                                                                         |
|-----------------------|-----------------------------------------------------------------------------------------|
| Wireless frequency    | 2.4 GHz                                                                                 |
| Measuring rate        | Standard 15 min, 1 min to 24 h can be set                                               |
| Oper. temp.           | -4 to 122 °F                                                                            |
| Storage temp.         | -40 to 131 °F                                                                           |
| Display (optional)    | Saveris H2D, H3 & H4D: LCD, 2 lines; 7-segment with symbols<br>Saveris U1: (no display) |
| Transmission distance | approx. 328' free field at a frequency of 2.4 GHz                                       |
| Wall bracket          | included                                                                                |

Alkali manganese batteries AA (0515 0414) are included in these ordering data (analog coupler excluded). Saveris probes are delivered with a certificate of conformance from the factory. NIST or ISO calibration certificates must be ordered separately. \*not for continuous high-humidity applications