VAISALA

**Order form**
Purchaser _____

Valid from June 2016
Order no. _____

# HMT311 Humidity and Temperature Transmitter

## For wall mounting

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Vaisala HUMICAP® Humidity and Temperature Transmitter | | | | | | | | | | | HMT310 | 1 | | A | | | | | | |
| 1 | Transmitter type | HMT311 | | | | | | | | | | | 1 | | | | | | | | |
| | | *RH+T+Td+Tdf+a+x+Tw+ppm+pw+pws+h* | | | | | | | | | | | | *B* | | | | | | | |
| 3 | Mounting plate | Standard mounting plate (recommended choice) | | | | | | | | | | | | | 5 | | | | | | |
| | | Mounting plate without flange (not for outdoor use) | | | | | | | | | | | | | 6 | | | | | | |
| 4 | Power supply | 24 VDC | | | | | | | | | | | | | | A | | | | | |
| 5 | Analog output signal | Analog output channel (Ch1&Ch2) | | | 4... 20 mA & RS232C | | | | | | | | | | | | 1 | | | | |
| | | Analog output channel (Ch1&Ch2) | | | 0... 20 mA & RS232C | | | | | | | | | | | | 2 | | | | |
| | | Analog output channel (Ch1&Ch2) | | | 1... 5 V & RS232C | | | | | | | | | | | | J | | | | |
| | | Analog output channel (Ch1&Ch2) | | | 0... 5 V & RS232C | | | | | | | | | | | | 4 | | | | |
| | | Analog output channel (Ch1&Ch2) | | | 0... 10 V & RS232C | | | | | | | | | | | | 5 | | | | |
| 6 | Analog output parameters | No analog outputs | | | | | | | | | | | | | | | | A | A | | |
| 7 | for Ch1 and Ch2 | RH | | (0... 100%RH) | | | | | | | | | | | | | | B | B | | |
| | | Temperature | | (choose T range below) | | | | | | | | | | | | | | C | C | | |
| | | Td (-40…60°C) | | (-40…140°F) | | | | | | | | | | | | | | D | D | | |
| | | Tdf (-40…60°C) | | (-40…140°F) | | | | | | | | | | | | | | E | E | | |
| | | a (0...160 g/m3) | | (0…69.9 gr/ft3) | | | | | | | | | | | | | | F | F | | |
| | | x (0...160 g/kg d.a) | | (0…1120 gr/lb) | | | | | | | | | | | | | | G | G | | |
| | | Tw (0…60°C) | | (+32...+140°F) | | | | | | | | | | | | | | H | H | | |
| | | ppm (0…5000) | | (0…5000) | | | | | | | | | | | | | | J | J | | |
| | | pw (0…1000 hPa) | | (0…14.5 psi) | | | | | | | | | | | | | | K | K | | |
| | | pws (0…1000 hPa) | | (0…14.5 psi) | | | | | | | | | | | | | | L | L | | |
| | | h (-40...1500 kJ/kg) | | *(-9.5...+652.6 Btu/lb)* | | | | | | | | | | | | | | M | M | | |
| | SPECIAL: | | Parameters | CH1:_____ | CH2:_____ | | | | | | | | | | | | | X | X | | |
| | NOTE: | | Scale for parameters | CH1:_____ | CH2:_____ | | | | | | | | | | | | | | | | |
| | - Choose A for both channels | | | | | | | | | | | Ch1 | | | | | | | | | |
| | when you don't use analog outputs | | | | | | | | | | | Ch2 | | | | | | | | | |
| 8 | Analog output range | No range | | | | | | | | | | | | | | | | | | A | |
| | for temperature | -60…+60°C | | (-76…140°F) | | | | | | | | | | | | | | | | B | |
| | | -40...+60°C | | (-40...+140°F) | | | | | | | | | | | | | | | | C | |
| | NOTE: | -20...+60°C | | (-4...+140°F) | | | | | | | | | | | | | | | | F | |
| | - Choose A when T | 0...+60°C | | (+32...+140°F) | | | | | | | | | | | | | | | | J | |
| | is not desired | special range : _____ °C/°F | | | | | | | | | | | | | | | | | | X | |
| 9 | Output units | Metric | | | | | | | | | | | | | | | | | | | 1 |
| | | Non-metric | | | | | | | | | | | | | | | | | | | 2 |
| 10 | Cable connector | *8-pole connector with 5m cable* | | | | *spare 5 m cable: 212142* | | | | | | | | | | | | | | | |
| | | *8-pole connector with 10 m cable* | | | | *spare 10 m cable: 210964SP* | | | | | | | | | | | | | | | |
| | | *8-pole counter connector* | | | | | | | | | | | | | | | | | | | |
| 11 | Operating manual | No manual | | | | | | | | | | | | | | | | | | | |
| | language | English | | | | | | | | | | | | | | | | | | | |
| | | German | | | | | | | | | | | | | | | | | | | |
| | | Japanese | | see latest manuals online: www.vaisala.com/HMT310 | | | | | | | | | | | | | | | | | |
| 12 | Probe type | Fixed | | | | | | | | | | | | | | | | | | | |
| 13 | Humidity sensor type | General purpose | | | | HUMICAP180R | | | | | | | | | | | | | | | |
| | | *Chemical purge* | | | | *HUMICAP180RC* | | | | | | | | | | | | | | | |
| | | *Catalytic humicap sensor* | | | | *HUMICAP180VHP* | | | | | | | | | | | | | | | |
| | | *Catalytic humicap sensor with chemical purge* | | | | *HUMICAP180VHPC* | | | | | | | | | | | | | | | |
| 14 | Sensor protection | PPS plastic grid & stainless steel netting | | | | *spare: DRW010281SP* | | | | | | | | | | | | | | | |
| | | PPS plastic grid | | | | *spare: DRW010276SP* | | | | | | | | | | | | | | | |
| | | Sintered stainless steel filter | | | | *spare: HM47280SP* | | | | | | | | | | | | | | | |
| 15 | No additional temperature probe | | | | | | | | | | | | | | | | | | | | |
| 16 | Installation kit | No kit | | | | | | | | | | | | | | | | | | | |
| 17 | Calibration certificate | No certificate | | | | | | | | | | | | | | | | | | | |
| | | At room temperature | | | | *standard service calibration: 216989* | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | 11 | 12 | 13 | 14 | 15 | 16 | 17 | | | |
| | Vaisala HUMICAP® Humidity and Temperature Transmitter | | | | | | | | | | | | A | | | 1 | A | | | | PRICE |
| 1 | Transmitter type | HMT311 | | | | | | | | | | | | | | | | | | | |
| | | *RH+T+Td+Tdf+a+x+Tw+ppm+pw+pws+h* | | | | | | | | | | | | | | | | | | | |
| 3 | Mounting plate | Standard mounting plate (recommended choice) | | | | | | | | | | | | | | | | | | | |
| | | Mounting plate without flange (not for outdoor use) | | | | | | | | | | | | | | | | | | | |
| 4 | Power supply | 24 VDC | | | | | | | | | | | | | | | | | | | |
| 5 | Analog output signal | Analog output channel (Ch1&Ch2) | | | | | | | | | | | | | | | | | | | |
| | | Analog output channel (Ch1&Ch2) | | | | | | | | | | | | | | | | | | | |
| | | Analog output channel (Ch1&Ch2) | | | | | | | | | | | | | | | | | | | |
| | | Analog output channel (Ch1&Ch2) | | | | | | | | | | | | | | | | | | | |
| | | Analog output channel (Ch1&Ch2) | | | | | | | | | | | | | | | | | | | |
| 6 | Analog output parameters | No analog outputs | | | | | | | | | | | | | | | | | | | |
| 7 | for Ch1 and Ch2 | RH | | | | | | | | | | | | | | | | | | | |
| | | Temperature | | | | | | | | | | | | | | | | | | | |
| | | Td (-40…60°C) | | | | | | | | | | | | | | | | | | | |
| | | Tdf (-40…60°C) | | | | | | | | | | | | | | | | | | | |
| | | a (0...160 g/m3) | | | | | | | | | | | | | | | | | | | |
| | | x (0...160 g/kg d.a) | | | | | | | | | | | | | | | | | | | |
| | | Tw (0…60°C) | | | | | | | | | | | | | | | | | | | |
| | | ppm (0…5000) | | | | | | | | | | | | | | | | | | | |
| | | pw (0…1000 hPa) | | | | | | | | | | | | | | | | | | | |
| | | pws (0…1000 hPa) | | | | | | | | | | | | | | | | | | | |
| | | h (-40...1500 kJ/kg) | | | | | | | | | | | | | | | | | | | |
| | SPECIAL: | | | | | | | | | | | | | | | | | | | | |
| | NOTE: | | | | | | | | | | | | | | | | | | | | |
| | - Choose A for both channels | | | | | | | | | | | | | | | | | | | | |
| | when you don't use analog outputs | | | | | | | | | | | | | | | | | | | | |
| 8 | Analog output range | No range | | | | | | | | | | | | | | | | | | | |
| | for temperature | -60…+60°C | | | | | | | | | | | | | | | | | | | |
| | | -40...+60°C | | | | | | | | | | | | | | | | | | | |
| | NOTE: | -20...+60°C | | | | | | | | | | | | | | | | | | | |
| | - Choose A when T | 0...+60°C | | | | | | | | | | | | | | | | | | | |
| | is not desired | special range : _____ °C/°F | | | | | | | | | | | | | | | | | | | |
| 9 | Output units | Metric | | | | | | | | | | | | | | | | | | | |
| | | Non-metric | | | | | | | | | | | | | | | | | | | |
| 10 | Cable connector | *8-pole connector with 5m cable* | | | | | | | | | *4* | | | | | | | | | | |
| | | *8-pole connector with 10 m cable* | | | | | | | | | *7* | | | | | | | | | | |
| | | *8-pole counter connector* | | | | | | | | | *5* | | | | | | | | | | |
| 11 | Operating manual | No manual | | | | | | | | | | A | | | | | | | | | |
| | language | English | | | | | | | | | | B | | | | | | | | | |
| | | German | | | | | | | | | | C | | | | | | | | | |
| | | Japanese | | | | | | | | | | D | | | | | | | | | |
| 12 | Probe type | Fixed | | | | | | | | | | | A | | | | | | | | |
| 13 | Humidity sensor type | General purpose | | | | | | | | | | | | A | | | | | | | |
| | | *Chemical purge* | | | | | | | | | | | | *D* | | | | | | | |
| | | *Catalytic humicap sensor* | | | | | | | | | | | | *J* | | | | | | | |
| | | *Catalytic humicap sensor with chemical purge* | | | | | | | | | | | | *K* | | | | | | | |
| 14 | Sensor protection | PPS plastic grid & stainless steel netting | | | | | | | | | | | | | A | | | | | | |
| | | PPS plastic grid | | | | | | | | | | | | | B | | | | | | |
| | | Sintered stainless steel filter | | | | | | | | | | | | | C | | | | | | |
| 15 | No additional temperature probe | | | | | | | | | | | | | | | 1 | | | | | |
| 16 | Installation kit | No kit | | | | | | | | | | | | | | | A | | | | |
| 17 | Calibration certificate | No certificate | | | | | | | | | | | | | | | | 1 | | | |
| | | At room temperature | | | | | | | | | | | | | | | | *2* | | | |

| | |
|---|---|
| TOTAL | |
| QTY | |
| TOTAL VALUE | |

**Selections in bold are included in the prices of the basic versions.**
*Selections in italic are available at an extra price.*

**Options and accessories:**

| | |
|---|---|
| *238607* | *USB Service cable* |
| *ASM211103-A* | *Rain Shield* |
| *231865* | Vaporized hydrogen peroxide (VHP) filter |

Example of order code with typical settings:

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HMT310 | 1 | B | 5 | A | 1 | B | C | C | 1 | 4 | B | A | A | A | 1 | A | 2 |

End customer: _____

VAISALA

**Order form**
Purchaser _____

Valid from June 2016
Order no. _____

# HMT313 Humidity and Temperature Transmitter

## For general use

| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | PRICE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Vaisala HUMICAP® Humidity and Temperature Transmitter** | | | **HMT310** | **3** | | | **A** | | | | | | | | | | | **1** | | | |
| **1 Transmitter type** | **HMT313** | | | **3** | | | | | | | | | | | | | | | | | |
| | ***RH+T+Td+Tdf+a+x+Tw+ppm+pw+pws+h*** | | | | ***B*** | | | | | | | | | | | | | | | | |
| **3 Mounting plate** | **Standard mounting plate (recommended choice)** | | | | | **5** | | | | | | | | | | | | | | | |
| | **Mounting plate without flange (not for outdoor use)** | | | | | **6** | | | | | | | | | | | | | | | |
| **4 Power supply** | **24 VDC** | | | | | | **A** | | | | | | | | | | | | | | |
| **5 Analog output signal** | **Analog output channel (Ch1&Ch2)** | **4... 20 mA & RS232C** | | | | | | **1** | | | | | | | | | | | | | |
| | **Analog output channel (Ch1&Ch2)** | **0... 20 mA & RS232C** | | | | | | **2** | | | | | | | | | | | | | |
| | **Analog output channel (Ch1&Ch2)** | **1... 5 V & RS232C** | | | | | | **J** | | | | | | | | | | | | | |
| | **Analog output channel (Ch1&Ch2)** | **0... 5 V & RS232C** | | | | | | **4** | | | | | | | | | | | | | |
| | **Analog output channel (Ch1&Ch2)** | **0... 10 V & RS232C** | | | | | | **5** | | | | | | | | | | | | | |
| **6 Analog output parameters** | **No analog outputs** | | | | | | | | **A** | **A** | | | | | | | | | | | |
| **7 for Ch1 and Ch2** | **RH** | **(0... 100%RH)** | | | | | | | **B** | **B** | | | | | | | | | | | |
| | **Temperature** | **(choose T range below)** | | | | | | | **C** | **C** | | | | | | | | | | | |
| | **ppm (0…5000)** | **(0…5000)** | | | | | | | **J** | **J** | | | | | | | | | | | |
| | **pw (0…1000 hPa)** | **(0…14.5 psi)** | | | | | | | **K** | **K** | | | | | | | | | | | |
| | **pws (0…1000 hPa)** | **(0…14.5 psi)** | | | | | | | **L** | **L** | | | | | | | | | | | |
| | **h (-40...1500 kJ/kg)** | ***(-9.5...+652.6 Btu/lb)*** | | | | | | | **M** | **M** | | | | | | | | | | | |
| | **Td (-40...100℃)** | **(-40...212℉)** | | | | | | | **N** | **N** | | | | | | | | | | | |
| | **Tdf (-40...100℃)** | **(-40...212℉)** | | | | | | | **P** | **P** | | | | | | | | | | | |
| | **a (0...500 g/m3)** | **(0...218.5 gr/ft3)** | | | | | | | **Q** | **Q** | | | | | | | | | | | |
| | **x (0...500 g/kg d.a)** | **(0...3500 gr/lb)** | | | | | | | **R** | **R** | | | | | | | | | | | |
| | **Tw (0...100℃)** | **(+32...+212℉)** | | | | | | | **S** | **S** | | | | | | | | | | | |
| SPECIAL: | Parameters | CH1:_____ | CH2:_____ | | | | | | **X** | **X** | | | | | | | | | | | |
| NOTE: | Scale for parameters | CH1:_____ | CH2:_____ | | | | | | | | | | | | | | | | | | |
| - Choose A for both channels | | | **Ch1** | | | | | | | | | | | | | | | | | | |
| when you don't use analog outputs | | | **Ch2** | | | | | | | | | | | | | | | | | | |
| **8 Analog output range** | **No range** | | | | | | | | | | **A** | | | | | | | | | | |
| **for temperature** | **-60…+60℃** | **(-76…140℉)** | | | | | | | | | **B** | | | | | | | | | | |
| | **-40...+60℃** | **(-40...+140℉)** | | | | | | | | | **C** | | | | | | | | | | |
| | **-40...+120℃** | **(-40...+248℉)** | | | | | | | | | **D** | | | | | | | | | | |
| | **-40...+180℃** | **(-40...+356℉)** | | | | | | | | | **E** | | | | | | | | | | |
| | **-20...+60℃** | **(-4...+140℉)** | | | | | | | | | **F** | | | | | | | | | | |
| | **-20...+80℃** | **(-4...+176℉)** | | | | | | | | | **G** | | | | | | | | | | |
| | **-20...+120℃** | **(-4...+248℉)** | | | | | | | | | **H** | | | | | | | | | | |
| | **0...+60℃** | **(+32...+140℉)** | | | | | | | | | **J** | | | | | | | | | | |
| **NOTE:** | **0...+100℃** | **(+32...+ 212℉)** | | | | | | | | | **K** | | | | | | | | | | |
| **- Choose A when T** | **0...+120℃** | **(+32...+248℉)** | | | | | | | | | **M** | | | | | | | | | | |
| **is not desired** | **special range : _____ ℃/℉** | | | | | | | | | | **X** | | | | | | | | | | |
| **9 Output units** | **Metric** | | | | | | | | | | | **1** | | | | | | | | | |
| | **Non-metric** | | | | | | | | | | | **2** | | | | | | | | | |
| **10 Cable connector** | *8-pole connector with 5m cable* | | *spare 5 m cable: 212142* | | | | | | | | | | *4* | | | | | | | | |
| | *8-pole connector with 10 m cable* | | *spare 10 m cable: 210964SP* | | | | | | | | | | *7* | | | | | | | | |
| | *8-pole counter connector* | | | | | | | | | | | | *5* | | | | | | | | |
| **11 Operating manual** | **No manual** | | | | | | | | | | | | | **A** | | | | | | | |
| **language** | **English** | | | | | | | | | | | | | **B** | | | | | | | |
| | **German** | | | | | | | | | | | | | **C** | | | | | | | |
| | **Japanese** | see latest manuals online: www.vaisala.com/hmt310 | | | | | | | | | | | | **D** | | | | | | | |
| **12 probe cable length** | **with 2 m cable, +80℃** | | | | | | | | | | | | | | **B** | | | | | | |
| | *with 5 m cable, +80℃* | | | | | | | | | | | | | | *C* | | | | | | |
| | *with 10 m cable, +80℃* | | | | | | | | | | | | | | *D* | | | | | | |
| | *with 2 m cable, +120℃* | | | | | | | | | | | | | | *5* | | | | | | |
| | *with 5 m cable, +120℃* | | | | | | | | | | | | | | *6* | | | | | | |
| | *with 10 m cable, +120℃* | | | | | | | | | | | | | | *7* | | | | | | |
| **13 Humidity sensor type** | **General purpose** | | **HUMICAP180R** | | | | | | | | | | | | | **A** | | | | | |
| | *Chemical purge* | | *HUMICAP180RC* | | | | | | | | | | | | | *D* | | | | | |
| | *Catalytic humicap sensor* | | *HUMICAP180VHP* | | | | | | | | | | | | | *J* | | | | | |
| | *Catalytic humicap sensor with chemical purge* | | *HUMICAP180VHPC* | | | | | | | | | | | | | *K* | | | | | |
| **14 Sensor protection** | **PPS plastic grid & stainless steel netting** | | *spare: DRW010281SP* | | | | | | | | | | | | | | **A** | | | | |
| | **PPS plastic grid** | | *spare: DRW010276SP* | | | | | | | | | | | | | | **B** | | | | |
| | **Sintered stainless steel filter** | | *spare: HM47280SP* | | | | | | | | | | | | | | **C** | | | | |
| **15 No additional temperature probe** | | | | | | | | | | | | | | | | | | **1** | | | |
| **16 Installation kit** | **No kit** | | | | | | | | | | | | | | | | | | **A** | | |
| | *Duct installation kit* | | *spare: 210697* | | | | | | | | | | | | | | | | *B* | | |
| | *Cable gland Agro, M20x1.5* | | *spare: HMP247CG* | | | | | | | | | | | | | | | | J | | |
| **17 Calibration certificate** | **No certificate** | | | | | | | | | | | | | | | | | | | **1** | |
| | **At room temperature** | | *standard service calibration: 216989* | | | | | | | | | | | | | | | | | ***2*** | |
| | | | | | | | | | | | | | | | | | | | | TOTAL | |
| | | | | | | | | | | | | | | | | | | | | QTY | |
| | | | | | | | | | | | | | | | | | | | | TOTAL VALUE | |

**Selections in bold are included in the prices of the basic versions.**
*Selections in italic are available at an extra price.*

**Options and accessories:**

| | |
|---|---|
| *238607* | *USB Service cable* |
| *ASM211103-A* | *Rain Shield* |
| *231865* | Vaporized hydrogen peroxide (VHP) filter |

Example of order code with typical settings:

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **HMT310** | **3** | **B** | **5** | **A** | **1** | **B** | **C** | **C** | **1** | **4** | **B** | **B** | **A** | **A** | **1** | **B** | **2** |

End customer: _____

VAISALA

**Order form**
Purchaser _____

Valid from June 2016
Order no. _____

# HMT314 Humidity and Temperature Transmitter

## For pressurized processes

| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Vaisala HUMICAP® Humidity and Temperature Transmitter** | | | **HMT310** | **4** | | | **A** | | | | | | | | | | | **1** | | | PRICE |
| **1 Transmitter type** | **HMT314** | | | **4** | | | | | | | | | | | | | | | | | |
| | ***RH+T+Td+Tdf+a+x+Tw+ppm+pw+pws+h*** | | | | ***B*** | | | | | | | | | | | | | | | | |
| **3 Mounting plate** | **Standard mounting plate (recommended choice)** | | | | | **5** | | | | | | | | | | | | | | | |
| | **Mounting plate without flange (not for outdoor use)** | | | | | **6** | | | | | | | | | | | | | | | |
| **4 Power supply** | **24 VDC** | | | | | | **A** | | | | | | | | | | | | | | |
| **5 Analog output signal** | **Analog output channel (Ch1&Ch2)** | **4... 20 mA & RS232C** | | | | | | **1** | | | | | | | | | | | | | |
| | **Analog output channel (Ch1&Ch2)** | **0... 20 mA & RS232C** | | | | | | **2** | | | | | | | | | | | | | |
| | **Analog output channel (Ch1&Ch2)** | **1... 5 V & RS232C** | | | | | | **J** | | | | | | | | | | | | | |
| | **Analog output channel (Ch1&Ch2)** | **0... 5 V & RS232C** | | | | | | **4** | | | | | | | | | | | | | |
| | **Analog output channel (Ch1&Ch2)** | **0... 10 V & RS232C** | | | | | | **5** | | | | | | | | | | | | | |
| **6 Analog output parameters** | **No analog outputs** | | | | | | | | **A** | **A** | | | | | | | | | | | |
| **7 for Ch1 and Ch2** | **RH** | **(0... 100%RH)** | | | | | | | **B** | **B** | | | | | | | | | | | |
| | **Temperature** | **(choose T range below)** | | | | | | | **C** | **C** | | | | | | | | | | | |
| | **ppm (0…5000)** | **(0…5000)** | | | | | | | **J** | **J** | | | | | | | | | | | |
| | **pw (0…1000 hPa)** | **(0…14.5 psi)** | | | | | | | **K** | **K** | | | | | | | | | | | |
| | **pws (0…1000 hPa)** | **(0…14.5 psi)** | | | | | | | **L** | **L** | | | | | | | | | | | |
| | **h (-40...1500 kJ/kg)** | ***(-9.5...+652.6 Btu/lb)*** | | | | | | | **M** | **M** | | | | | | | | | | | |
| | **Td (-40...100°C)** | **(-40...212°F)** | | | | | | | **N** | **N** | | | | | | | | | | | |
| | **Tdf (-40...100°C)** | **(-40...212°F)** | | | | | | | **P** | **P** | | | | | | | | | | | |
| | **a (0...500 g/m3)** | **(0...218.5 gr/ft3)** | | | | | | | **Q** | **Q** | | | | | | | | | | | |
| | **x (0...500 g/kg d.a)** | **(0...3500 gr/lb)** | | | | | | | **R** | **R** | | | | | | | | | | | |
| | **Tw (0...100°C)** | **(+32...+212°F)** | | | | | | | **S** | **S** | | | | | | | | | | | |
| SPECIAL: | Parameters | CH1:_____ | CH2:_____ | | | | | | **X** | **X** | | | | | | | | | | | |
| NOTE: | Scale for parameters | CH1:_____ | CH2:_____ | | | | | | | | | | | | | | | | | | |
| - Choose A for both channels | | | **Ch1** | | | | | | | | | | | | | | | | | | |
| when you don't use analog outputs | | | **Ch2** | | | | | | | | | | | | | | | | | | |
| **8 Analog output range** | **No range** | | | | | | | | | | **A** | | | | | | | | | | |
| **for temperature** | **-60…+60°C** | **(-76…140°F)** | | | | | | | | | **B** | | | | | | | | | | |
| | **-40...+60°C** | **(-40...+140°F)** | | | | | | | | | **C** | | | | | | | | | | |
| | **-40...+120°C** | **(-40...+248°F)** | | | | | | | | | **D** | | | | | | | | | | |
| | **-40...+180°C** | **(-40...+356°F)** | | | | | | | | | **E** | | | | | | | | | | |
| | **-20...+60°C** | **(-4...+140°F)** | | | | | | | | | **F** | | | | | | | | | | |
| | **-20...+80°C** | **(-4...+176°F)** | | | | | | | | | **G** | | | | | | | | | | |
| | **-20...+120°C** | **(-4...+248°F)** | | | | | | | | | **H** | | | | | | | | | | |
| | **0...+60°C** | **(+32...+140°F)** | | | | | | | | | **J** | | | | | | | | | | |
| **NOTE:** | **0...+100°C** | **(+32...+ 212°F)** | | | | | | | | | **K** | | | | | | | | | | |
| **- Choose A when T** | **0...+120°C** | **(+32...+248°F)** | | | | | | | | | **M** | | | | | | | | | | |
| **is not desired** | **special range : _____ °C/°F** | | | | | | | | | | **X** | | | | | | | | | | |
| **9 Output units** | **Metric** | | | | | | | | | | | **1** | | | | | | | | | |
| | **Non-metric** | | | | | | | | | | | **2** | | | | | | | | | |
| **10 Cable connector** | *8-pole connector with 5m cable* | | *spare 5 m cable: 212142* | | | | | | | | | | *4* | | | | | | | | |
| | *8-pole connector with 10 m cable* | | *spare 10 m cable: 210964SP* | | | | | | | | | | *7* | | | | | | | | |
| | *8-pole counter connector* | | | | | | | | | | | | *5* | | | | | | | | |
| **11 Operating manual** | **No manual** | | | | | | | | | | | | | **A** | | | | | | | |
| **language** | **English** | | | | | | | | | | | | | **B** | | | | | | | |
| | **German** | | | | | | | | | | | | | **C** | | | | | | | |
| | **Japanese** | see latest manuals online: www.vaisala.com/hmt310 | | | | | | | | | | | | **D** | | | | | | | |
| **12 Probe cable length** | **with 2 m cable** | | | | | | | | | | | | | | **E** | | | | | | |
| | *with 5 m cable* | | | | | | | | | | | | | | *F* | | | | | | |
| | *with 10 m cable* | | | | | | | | | | | | | | *G* | | | | | | |
| **13 Humidity sensor type** | **General purpose** | | **HUMICAP180R** | | | | | | | | | | | | | **A** | | | | | |
| | *Chemical purge* | | *HUMICAP180RC* | | | | | | | | | | | | | *D* | | | | | |
| | *Catalytic humicap sensor* | | *HUMICAP180VHP* | | | | | | | | | | | | | *J* | | | | | |
| | *Catalytic humicap sensor with chemical purge* | | *HUMICAP180VHPC* | | | | | | | | | | | | | *K* | | | | | |
| **14 Sensor protection** | **PPS plastic grid & stainless steel netting** | | *spare: DRW010281SP* | | | | | | | | | | | | | | **A** | | | | |
| | **PPS plastic grid** | | *spare: DRW010276SP* | | | | | | | | | | | | | | **B** | | | | |
| | **Sintered stainless steel filter** | | *spare: HM47280SP* | | | | | | | | | | | | | | **C** | | | | |
| **15 No additional temperature probe** | | | | | | | | | | | | | | | | | | **1** | | | |
| **16 Installation kit** | **Fitting body M22 x 1,5** | | *spare: 17223SP* | | | | | | | | | | | | | | | | **K** | | |
| | **Fitting body NPT 1/2"** | | spare: 17225SP | | | | | | | | | | | | | | | | **L** | | |
| **17 Calibration certificate** | **No certificate** | | | | | | | | | | | | | | | | | | | **1** | |
| | **At room temperature** | | *standard service calibration: 216989* | | | | | | | | | | | | | | | | | ***2*** | |
| | | | | | | | | | | | | | | | | | | | | TOTAL | |
| | | | | | | | | | | | | | | | | | | | | QTY | |
| | | | | | | | | | | | | | | | | | | | | TOTAL VALUE | |

**Selections in bold are included in the prices of the basic versions.**
*Selections in italic are available at an extra price.*

**Options and accessories:**

| | |
|---|---|
| *238607* | *USB Service cable* |
| *ASM211103-A* | *Rain Shield* |
| *231865* | Vaporized hydrogen peroxide (VHP) filter |

Example of order code with typical settings:

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **HMT310** | **4** | **B** | **5** | **A** | **1** | **B** | **C** | **C** | **1** | **4** | **B** | **E** | **A** | **A** | **1** | **K** | **2** |

End customer: _____

VAISALA

**Order form**
Purchaser _____

Valid from June 2016
Order no. _____

# HMT315 Humidity and Temperature Transmitter

## For high temperatures

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | **Vaisala HUMICAP® Humidity and Temperature Transmitter** | | | | | | | | | | | **HMT310** | **5** | | **A** | | | | | | |
| **1** | **Transmitter type** | **HMT315** | | | | | | | | | | | **5** | | | | | | | | |
| | | ***RH+T+Td+Tdf+a+x+Tw+ppm+pw+pws+h*** | | | | | | | | | | | | ***B*** | | | | | | | |
| **3** | **Mounting plate** | **Standard mounting plate (recommended choice)** | | | | | | | | | | | | | **5** | | | | | | |
| | | **Mounting plate without flange (not for outdoor use)** | | | | | | | | | | | | | **6** | | | | | | |
| **4** | **Power supply** | **24 VDC** | | | | | | | | | | | | | | **A** | | | | | |
| **5** | **Analog output signal** | **Analog output channel (Ch1&Ch2)** | | | | | | | | | | | | | | | **1** | | | | |
| | | **Analog output channel (Ch1&Ch2)** | | | | | | | | | | | | | | | **2** | | | | |
| | | **Analog output channel (Ch1&Ch2)** | | | | | | | | | | | | | | | **J** | | | | |
| | | **Analog output channel (Ch1&Ch2)** | | | | | | | | | | | | | | | **4** | | | | |
| | | **Analog output channel (Ch1&Ch2)** | | | | | | | | | | | | | | | **5** | | | | |
| **6** | **Analog output parameters** | **No analog outputs** | | | | | | | | | | | | | | | | **A** | **A** | | |
| **7** | **for Ch1 and Ch2** | **RH** | | | | | | | | | | | | | | | | **B** | **B** | | |
| | | **Temperature** | | | | | | | | | | | | | | | | **C** | **C** | | |
| | | **ppm (0…5000)** | | | | | | | | | | | | | | | | **J** | **J** | | |
| | | **pw (0…1000 hPa)** | | | | | | | | | | | | | | | | **K** | **K** | | |
| | | **pws (0…1000 hPa)** | | | | | | | | | | | | | | | | **L** | **L** | | |
| | | **h (-40...1500 kJ/kg)** | | | | | | | | | | | | | | | | **M** | **M** | | |
| | | **Td (-40...100°C)** | | | | | | | | | | | | | | | | **N** | **N** | | |
| | | **Tdf (-40...100°C)** | | | | | | | | | | | | | | | | **P** | **P** | | |
| | | **a (0...500 g/m3)** | | | | | | | | | | | | | | | | **Q** | **Q** | | |
| | | **x (0...500 g/kg d.a)** | | | | | | | | | | | | | | | | **R** | **R** | | |
| | | **Tw (0...100°C)** | | | | | | | | | | | | | | | | **S** | **S** | | |
| | SPECIAL: | | | | | | | | | | | | | | | | | **X** | **X** | | |
| | NOTE: | | | | | | | | | | | | | | | | | | | | |
| | - Choose A for both channels | | | | | | | | | | | | | | | | | | | | |
| | when you don't use analog outputs | | | | | | | | | | | | | | | | | | | | |
| **8** | **Analog output range** | **No range** | | | | | | | | | | | | | | | | | | **A** | |
| | **for temperature** | **-60…+60°C** | | | | | | | | | | | | | | | | | | **B** | |
| | | **-40...+60°C** | | | | | | | | | | | | | | | | | | **C** | |
| | | **-40...+120°C** | | | | | | | | | | | | | | | | | | **D** | |
| | | **-40...+180°C** | | | | | | | | | | | | | | | | | | **E** | |
| | | **-20...+60°C** | | | | | | | | | | | | | | | | | | **F** | |
| | | **-20...+80°C** | | | | | | | | | | | | | | | | | | **G** | |
| | | **-20...+120°C** | | | | | | | | | | | | | | | | | | **H** | |
| | | **0...+60°C** | | | | | | | | | | | | | | | | | | **J** | |
| | **NOTE:** | **0...+100°C** | | | | | | | | | | | | | | | | | | **K** | |
| | **- Choose A when T** | **0...+120°C** | | | | | | | | | | | | | | | | | | **M** | |
| | **is not desired** | **special range : _____ °C/°F** | | | | | | | | | | | | | | | | | | **X** | |
| **9** | **Output units** | **Metric** | | | | | | | | | | | | | | | | | | | **1** |
| | | **Non-metric** | | | | | | | | | | | | | | | | | | | **2** |
| **10** | **Cable connector** | *8-pole connector with 5m cable* | | | | | | | | | | | | | | | | | | | |
| | | *8-pole connector with 10 m cable* | | | | | | | | | | | | | | | | | | | |
| | | *8-pole counter connector* | | | | | | | | | | | | | | | | | | | |
| **11** | **Operating manual** | **No manual** | | | | | | | | | | | | | | | | | | | |
| | **language** | **English** | | | | | | | | | | | | | | | | | | | |
| | | **German** | | | | | | | | | | | | | | | | | | | |
| | | **Japanese** | | | | | | | | | | | | | | | | | | | |
| **12** | **Probe cable length** | **with 2 m cable** | | | | | | | | | | | | | | | | | | | |
| | | *with 5 m cable* | | | | | | | | | | | | | | | | | | | |
| | | *with 10 m cable* | | | | | | | | | | | | | | | | | | | |
| **13** | **Humidity sensor type** | **General purpose** | | | | | | | | | | | | | | | | | | | |
| | | *Chemical purge* | | | | | | | | | | | | | | | | | | | |
| | | *Catalytic humicap sensor* | | | | | | | | | | | | | | | | | | | |
| | | *Catalytic humicap sensor with chemical purge* | | | | | | | | | | | | | | | | | | | |
| **14** | **Sensor protection** | **PPS plastic grid & stainless steel netting** | | | | | | | | | | | | | | | | | | | |
| | | **PPS plastic grid** | | | | | | | | | | | | | | | | | | | |
| | | **Sintered stainless steel filter** | | | | | | | | | | | | | | | | | | | |
| **15** | **No additional temperature probe** | | | | | | | | | | | | | | | | | | | | |
| **16** | **Installation kit** | **No kit** | | | | | | | | | | | | | | | | | | | |
| | | *Mounting flange for HMP305* | | | | | | | | | | | | | | | | | | | |
| **17** | **Calibration certificate** | **No certificate** | | | | | | | | | | | | | | | | | | | |
| | | **At room temperature** | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | 11 | 12 | 13 | 14 | 15 | 16 | 17 | | | |
| | **Vaisala HUMICAP® Humidity and Temperature Transmitter** | | | | | | | | | | | | | | | **1** | | | | | PRICE |
| **1** | **Transmitter type** | **HMT315** | | | | | | | | | | | | | | | | | | | |
| | | ***RH+T+Td+Tdf+a+x+Tw+ppm+pw+pws+h*** | | | | | | | | | | | | | | | | | | | |
| **3** | **Mounting plate** | **Standard mounting plate (recommended choice)** | | | | | | | | | | | | | | | | | | | |
| | | **Mounting plate without flange (not for outdoor use)** | | | | | | | | | | | | | | | | | | | |
| **4** | **Power supply** | **24 VDC** | | | | | | | | | | | | | | | | | | | |
| **5** | **Analog output signal** | **Analog output channel (Ch1&Ch2)** | | | | | | | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | | | | | | | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | | | | | | | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | | | | | | | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | | | | | | | | | | | | | | | | | | | |
| **6** | **Analog output parameters** | **No analog outputs** | | | | | | | | | | | | | | | | | | | |
| **7** | **for Ch1 and Ch2** | **RH** | | | | | | | | | | | | | | | | | | | |
| | | **Temperature** | | | | | | | | | | | | | | | | | | | |
| | | **ppm (0…5000)** | | | | | | | | | | | | | | | | | | | |
| | | **pw (0…1000 hPa)** | | | | | | | | | | | | | | | | | | | |
| | | **pws (0…1000 hPa)** | | | | | | | | | | | | | | | | | | | |
| | | **h (-40...1500 kJ/kg)** | | | | | | | | | | | | | | | | | | | |
| | | **Td (-40...100°C)** | | | | | | | | | | | | | | | | | | | |
| | | **Tdf (-40...100°C)** | | | | | | | | | | | | | | | | | | | |
| | | **a (0...500 g/m3)** | | | | | | | | | | | | | | | | | | | |
| | | **x (0...500 g/kg d.a)** | | | | | | | | | | | | | | | | | | | |
| | | **Tw (0...100°C)** | | | | | | | | | | | | | | | | | | | |
| | SPECIAL: | | | | | | | | | | | | | | | | | | | | |
| | NOTE: | | | | | | | | | | | | | | | | | | | | |
| | - Choose A for both channels | | | | | | | | | | **Ch1** | | | | | | | | | | |
| | when you don't use analog outputs | | | | | | | | | | **Ch2** | | | | | | | | | | |
| **8** | **Analog output range** | **No range** | | | | | | | | | | | | | | | | | | | |
| | **for temperature** | **-60…+60°C** | | | | | | | | | | | | | | | | | | | |
| | | **-40...+60°C** | | | | | | | | | | | | | | | | | | | |
| | | **-40...+120°C** | | | | | | | | | | | | | | | | | | | |
| | | **-40...+180°C** | | | | | | | | | | | | | | | | | | | |
| | | **-20...+60°C** | | | | | | | | | | | | | | | | | | | |
| | | **-20...+80°C** | | | | | | | | | | | | | | | | | | | |
| | | **-20...+120°C** | | | | | | | | | | | | | | | | | | | |
| | | **0...+60°C** | | | | | | | | | | | | | | | | | | | |
| | **NOTE:** | **0...+100°C** | | | | | | | | | | | | | | | | | | | |
| | **- Choose A when T** | **0...+120°C** | | | | | | | | | | | | | | | | | | | |
| | **is not desired** | **special range : _____ °C/°F** | | | | | | | | | | | | | | | | | | | |
| **9** | **Output units** | **Metric** | | | | | | | | | | | | | | | | | | | |
| | | **Non-metric** | | | | | | | | | | | | | | | | | | | |
| **10** | **Cable connector** | *8-pole connector with 5m cable* | | | | | | | | *spare 5 m cable: 212142* | | *4* | | | | | | | | | |
| | | *8-pole connector with 10 m cable* | | | | | | | | *spare 10 m cable: 210964SP* | | *7* | | | | | | | | | |
| | | *8-pole counter connector* | | | | | | | | | | *5* | | | | | | | | | |
| **11** | **Operating manual** | **No manual** | | | | | | | | | | | **A** | | | | | | | | |
| | **language** | **English** | | | | | | | | | | | **B** | | | | | | | | |
| | | **German** | | | | | | | | | | | **C** | | | | | | | | |
| | | **Japanese** | | | | | | | | see latest manuals online: www.vaisala.com/hmt310 | | | **D** | | | | | | | | |
| **12** | **Probe cable length** | **with 2 m cable** | | | | | | | | | | | | **H** | | | | | | | |
| | | *with 5 m cable* | | | | | | | | | | | | *J* | | | | | | | |
| | | *with 10 m cable* | | | | | | | | | | | | *K* | | | | | | | |
| **13** | **Humidity sensor type** | **General purpose** | | | | | | | | | **HUMICAP180R** | | | | **A** | | | | | | |
| | | *Chemical purge* | | | | | | | | | *HUMICAP180RC* | | | | *D* | | | | | | |
| | | *Catalytic humicap sensor* | | | | | | | | | *HUMICAP180VHP* | | | | *J* | | | | | | |
| | | *Catalytic humicap sensor with chemical purge* | | | | | | | | | *HUMICAP180VHPC* | | | | *K* | | | | | | |
| **14** | **Sensor protection** | **PPS plastic grid & stainless steel netting** | | | | | | | | | *spare: DRW010281SP* | | | | | **A** | | | | | |
| | | **PPS plastic grid** | | | | | | | | | *spare: DRW010276SP* | | | | | **B** | | | | | |
| | | **Sintered stainless steel filter** | | | | | | | | | *spare: HM47280SP* | | | | | **C** | | | | | |
| **15** | **No additional temperature probe** | | | | | | | | | | | | | | | | **1** | | | | |
| **16** | **Installation kit** | **No kit** | | | | | | | | | | | | | | | | **A** | | | |
| | | *Mounting flange for HMP305* | | | | | | | | | *spare: 210696* | | | | | | | *D* | | | |
| **17** | **Calibration certificate** | **No certificate** | | | | | | | | | | | | | | | | | **1** | | |
| | | **At room temperature** | | | | | | | | | *standard service calibration: 216989* | | | | | | | | ***2*** | | |
| | | | | | | | | | | | | | | | | | | | | TOTAL | |
| | | | | | | | | | | | | | | | | | | | | QTY | |
| | | | | | | | | | | | | | | | | | | | | TOTAL VALUE | |

**Selections in bold are included in the prices of the basic versions.**
*Selections in italic are available at an extra price.*

**Options and accessories:**

| | |
|---|---|
| *238607* | *USB Service cable* |
| *ASM211103-A* | *Rain Shield* |
| *231865* | Vaporized hydrogen peroxide (VHP) filter |

Example of order code with typical settings:

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **HMT310** | **5** | **B** | **5** | **A** | **1** | **B** | **C** | **C** | **1** | **4** | **B** | **H** | **A** | **A** | **1** | **A** | **2** |

End customer: _____

VAISALA

**Order form**
Purchaser _____

Valid from June 2016
Order no. _____

# HMT317 Humidity and Temperature Transmitter

## Standard probe

| | | | | 1 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Vaisala HUMICAP® Humidity and Temperature Transmitter** | | **HMT310** | **7** | | **A** | | | | | | | | | | | **1** | | | PRICE |
| **1** | **Transmitter type** | **HMT317** | | **7** | | | | | | | | | | | | | | | | |
| | | ***RH+T+Td+Tdf+a+x+Tw+ppm+pw+pws+h*** | | ***B*** | | | | | | | | | | | | | | | | |
| **3** | **Mounting plate** | **Standard mounting plate (recommended choice)** | | | **5** | | | | | | | | | | | | | | | |
| | | **Mounting plate without flange (not for outdoor use)** | | | **6** | | | | | | | | | | | | | | | |
| **4** | **Power supply** | **24 VDC** | | | | **A** | | | | | | | | | | | | | | |
| **5** | **Analog output signal** | **Analog output channel (Ch1&Ch2)** | **4... 20 mA & RS232C** | | | | **1** | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | **0... 20 mA & RS232C** | | | | **2** | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | **1... 5 V & RS232C** | | | | **J** | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | **0... 5 V & RS232C** | | | | **4** | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | **0... 10 V & RS232C** | | | | **5** | | | | | | | | | | | | | |
| **6** | **Analog output parameters** | **No analog outputs** | | | | | | **A** | **A** | | | | | | | | | | | |
| **7** | **for Ch1 and Ch2** | **RH** | **(0... 100%RH)** | | | | | **B** | **B** | | | | | | | | | | | |
| | | **Temperature** | **(choose T range below)** | | | | | **C** | **C** | | | | | | | | | | | |
| | | **ppm (0…5000)** | **(0…5000)** | | | | | **J** | **J** | | | | | | | | | | | |
| | | **pw (0…1000 hPa)** | **(0…14.5 psi)** | | | | | **K** | **K** | | | | | | | | | | | |
| | | **pws (0…1000 hPa)** | **(0…14.5 psi)** | | | | | **L** | **L** | | | | | | | | | | | |
| | | **h (-40...1500 kJ/kg)** | ***(-9.5...+652.6 Btu/lb)*** | | | | | **M** | **M** | | | | | | | | | | | |
| | | **Td (-40...100°C)** | **(-40...212°F)** | | | | | **N** | **N** | | | | | | | | | | | |
| | | **Tdf (-40...100°C)** | **(-40...212°F)** | | | | | **P** | **P** | | | | | | | | | | | |
| | | **a (0...500 g/m3)** | **(0...218.5 gr/ft3)** | | | | | **Q** | **Q** | | | | | | | | | | | |
| | | **x (0...500 g/kg d.a)** | **(0...3500 gr/lb)** | | | | | **R** | **R** | | | | | | | | | | | |
| | | **Tw (0...100°C)** | **(+32...+212°F)** | | | | | **S** | **S** | | | | | | | | | | | |
| | SPECIAL: | Parameters | CH1:_____ CH2:_____ | | | | | **X** | **X** | | | | | | | | | | | |
| | NOTE: | Scale for parameters | CH1:_____ CH2:_____ | | | | | | | | | | | | | | | | | |
| | - Choose A for both channels | | **Ch1** | | | | | | | | | | | | | | | | | |
| | when you don't use analog outputs | | **Ch2** | | | | | | | | | | | | | | | | | |
| **8** | **Analog output range** | **No range** | | | | | | | | **A** | | | | | | | | | | |
| | **for temperature** | **-60…+60°C** | **(-76…140°F)** | | | | | | | **B** | | | | | | | | | | |
| | | **-40...+60°C** | **(-40...+140°F)** | | | | | | | **C** | | | | | | | | | | |
| | | **-40...+120°C** | **(-40...+248°F)** | | | | | | | **D** | | | | | | | | | | |
| | | **-40...+180°C** | **(-40...+356°F)** | | | | | | | **E** | | | | | | | | | | |
| | | **-20...+60°C** | **(-4...+140°F)** | | | | | | | **F** | | | | | | | | | | |
| | | **-20...+80°C** | **(-4...+176°F)** | | | | | | | **G** | | | | | | | | | | |
| | | **-20...+120°C** | **(-4...+248°F)** | | | | | | | **H** | | | | | | | | | | |
| | | **0...+60°C** | **(+32...+140°F)** | | | | | | | **J** | | | | | | | | | | |
| | **NOTE:** | **0...+100°C** | **(+32...+ 212°F)** | | | | | | | **K** | | | | | | | | | | |
| | **- Choose A when T** | **0...+120°C** | **(+32...+248°F)** | | | | | | | **M** | | | | | | | | | | |
| | **is not desired** | **special range : _____ °C/°F** | | | | | | | | **X** | | | | | | | | | | |
| **9** | **Output units** | **Metric** | | | | | | | | | **1** | | | | | | | | | |
| | | **Non-metric** | | | | | | | | | **2** | | | | | | | | | |
| **10** | **Cable connector** | *8-pole connector with 5m cable* | *spare 5 m cable: 212142* | | | | | | | | | *4* | | | | | | | | |
| | | *8-pole connector with 10 m cable* | *spare 10 m cable: 210964SP* | | | | | | | | | *7* | | | | | | | | |
| | | *8-pole counter connector* | | | | | | | | | | *5* | | | | | | | | |
| **11** | **Operating manual** | **No manual** | | | | | | | | | | | **A** | | | | | | | |
| | **language** | **English** | | | | | | | | | | | **B** | | | | | | | |
| | | **German** | | | | | | | | | | | **C** | | | | | | | |
| | | **Japanese** | see latest manuals online: www.vaisala.com/hmt310 | | | | | | | | | | **D** | | | | | | | |
| **12** | **Probe cable length** | **with 2 m cable** | | | | | | | | | | | | **P** | | | | | | |
| | | *with 5 m cable* | | | | | | | | | | | | *Q* | | | | | | |
| | | *with 10 m cable* | | | | | | | | | | | | *R* | | | | | | |
| **13** | **Humidity sensor type** | **General purpose** | **HUMICAP180R** | | | | | | | | | | | | **A** | | | | | |
| | | *Chemical purge* | *HUMICAP180RC* | | | | | | | | | | | | *D* | | | | | |
| | | *Catalytic humicap sensor* | *HUMICAP180VHP* | | | | | | | | | | | | *J* | | | | | |
| | | *Catalytic humicap sensor with chemical purge* | *HUMICAP180VHPC* | | | | | | | | | | | | *K* | | | | | |
| **14** | **Sensor protection** | **PPS plastic grid & stainless steel netting** | *spare: DRW010281SP* | | | | | | | | | | | | | **A** | | | | |
| | | **PPS plastic grid** | *spare: DRW010276SP* | | | | | | | | | | | | | **B** | | | | |
| | | **Sintered stainless steel filter** | *spare: HM47280SP* | | | | | | | | | | | | | **C** | | | | |
| **15** | **No additional temperature probe** | | | | | | | | | | | | | | | | **1** | | | |
| **16** | **Installation kit** | **No kit** | | | | | | | | | | | | | | | | **A** | | |
| | | *Duct installation kit* | *spare: 210697* | | | | | | | | | | | | | | | *B* | | |
| | | *ISO 3/8 Swagelok® connector* | *spare: SWG12ISO38* | | | | | | | | | | | | | | | *G* | | |
| | | *NPT 1/2" Swagelok® connector* | *spare: SWG12NPT12* | | | | | | | | | | | | | | | *H* | | |
| | | *Cable gland Agro, M20x1.5* | *spare: HMP247CG* | | | | | | | | | | | | | | | J | | |
| **17** | **Calibration certificate** | **No certificate** | | | | | | | | | | | | | | | | | **1** | |
| | | **At room temperature** | *standard service calibration: 216989* | | | | | | | | | | | | | | | | ***2*** | |
| | | | | | | | | | | | | | | | | | | | TOTAL | |
| | | | | | | | | | | | | | | | | | | | QTY | |
| | | | | | | | | | | | | | | | | | | | TOTAL VALUE | |

**Selections in bold are included in the prices of the basic versions.**
*Selections in italic are available at an extra price.*

**Options and accessories:**

| | |
|---|---|
| *238607* | *USB Service cable* |
| *ASM211103-A* | *Rain Shield* |
| *231865* | Vaporized hydrogen peroxide (VHP) filter |

Example of order code with typical settings:

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **HMT310** | **1** | **B** | **5** | **A** | **1** | **B** | **C** | **C** | **1** | **4** | **B** | **P** | **A** | **A** | **1** | **A** | **2** |

End customer: _____

VAISALA

**Order form**
Purchaser _____

Valid from June 2016
Order no. _____

# HMT317 Humidity and Temperature Transmitter with warmed probe

## For dewpoint measurement at high humidities

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | |
| | **Vaisala HUMICAP® Humidity and Temperature Transmitter** | | | **HMT310** | | **C** | | **A** | | | | **A** | | | | | | | **1** | | | PRICE |
| **1** | **Transmitter type** | *HMT317* | | | *7* | | | | | | | | | | | | | | | | | |
| | | *Fuel cell model with extended heating* | | | *F* | | | | | | | | | | | | | | | | | |
| **2** | **Parameters** | ***Td+Tdf+x*** | | | | ***C*** | | | | | | | | | | | | | | | | |
| **3** | **Mounting plate** | **Standard mounting plate (recommended choice)** | | | | | **5** | | | | | | | | | | | | | | | |
| | | **Mounting plate without flange (not for outdoor use)** | | | | | **6** | | | | | | | | | | | | | | | |
| **4** | **Power supply** | **24 VDC** | | | | | | **A** | | | | | | | | | | | | | | |
| **5** | **Analog output signal** | **Analog output channel (Ch1&Ch2)** | **4... 20 mA & RS232C** | | | | | | **1** | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | **0... 20 mA & RS232C** | | | | | | **2** | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | **1... 5 V & RS232C** | | | | | | **J** | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | **0... 5 V & RS232C** | | | | | | **4** | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | **0... 10 V & RS232C** | | | | | | **5** | | | | | | | | | | | | | |
| **6** | **Analog output parameters** | **No analog outputs** | | | | | | | | **A** | **A** | | | | | | | | | | | |
| **7** | **for Ch1 and Ch2** | **Td (-40...100℃)** | **(-40...212℉)** | | | | | | | **N** | **N** | | | | | | | | | | | |
| | | **Tdf (-40...100℃)** | **(-40...212℉)** | | | | | | | **P** | **P** | | | | | | | | | | | |
| | | **x (0...500 g/kg d.a)** | **(0...3500 gr/lb)** | | | | | | | **R** | **R** | | | | | | | | | | | |
| | SPECIAL: | Parameters | CH1:_____ | CH2:_____ | | | | | | **X** | **X** | | | | | | | | | | | |
| | NOTE: | Scale for parameters | CH1:_____ | CH2:_____ | | | | | | | | | | | | | | | | | | |
| | - Choose A for both channels | | | **Ch1** | | | | | | | | | | | | | | | | | | |
| | when you don't use analog outputs | | | **Ch2** | | | | | | | | | | | | | | | | | | |
| **8** | **No temperature output** | | | | | | | | | | | **A** | | | | | | | | | | |
| **9** | **Output units** | **Metric** | | | | | | | | | | | **1** | | | | | | | | | |
| | | **Non-metric** | | | | | | | | | | | **2** | | | | | | | | | |
| **10** | **Cable connector** | *8-pole connector with 5m cable* | | *spare 5 m cable: 212142* | | | | | | | | | | *4* | | | | | | | | |
| | | *8-pole connector with 10 m cable* | | *spare 10 m cable: 210964SP* | | | | | | | | | | *7* | | | | | | | | |
| | | *8-pole counter connector* | | | | | | | | | | | | *5* | | | | | | | | |
| **11** | **Operating manual language** | **No manual** | | | | | | | | | | | | | **A** | | | | | | | |
| | | **English** | | | | | | | | | | | | | **B** | | | | | | | |
| | | **German** | | | | | | | | | | | | | **C** | | | | | | | |
| | | **Japanese** | see latest manuals online: www.vaisala.com/hmt310 | | | | | | | | | | | | **D** | | | | | | | |
| **12** | **Probe cable length** | **with 2 m cable** | | | | | | | | | | | | | | **P** | | | | | | |
| | | *with 5 m cable* | | | | | | | | | | | | | | *Q* | | | | | | |
| | | *with 10 m cable* | | | | | | | | | | | | | | *R* | | | | | | |
| **13** | **Humidity sensor type** | *Chemical purge* | | *HUMICAP180RC* | *recommended choice* | | | | | | | | | | | | *F* | | | | | |
| | | *Start-up purge only* | | *HUMICAP180RC* | | | | | | | | | | | | | *G* | | | | | |
| | | *No purge* | | *HUMICAP180RC* | *recommended for F model* | | | | | | | | | | | | *E* | | | | | |
| | | *Catalytic humicap sensor with chemical purge* | | *HUMICAP180VHPC* | | | | | | | | | | | | | *L* | | | | | |
| **14** | **Sensor protection** | **PPS plastic grid & stainless steel netting** | | *spare: DRW010281SP* | | | | | | | | | | | | | | **A** | | | | |
| | | **PPS plastic grid** | | *spare: DRW010276SP* | | | | | | | | | | | | | | **B** | | | | |
| | | **Sintered stainless steel filter** | | *spare: HM47280SP* | | | | | | | | | | | | | | **C** | | | | |
| | | **Membrane SST filter** | | recommended for fuel cell applications (F model) | | | | | | | | | | | | | | **G** | | | | |
| **15** | **No additional temperature probe** | | | | | | | | | | | | | | | | | | **1** | | | |
| **16** | **Installation kit** | **No kit** | | | | | | | | | | | | | | | | | | **A** | | |
| | | *Duct installation kit* | | *spare: 210697* | | | | | | | | | | | | | | | | *B* | | |
| | | *ISO 3/8 Swagelok® connector* | | *spare: SWG12ISO38* | | | | | | | | | | | | | | | | *G* | | |
| | | *NPT 1/2" Swagelok® connector* | | *spare: SWG12NPT12* | | | | | | | | | | | | | | | | *H* | | |
| | | *Cable gland Agro, M20x1.5* | | *spare: HMP247CG* | | | | | | | | | | | | | | | | J | | |
| **17** | **Calibration certificate** | **No certificate** | | | | | | | | | | | | | | | | | | | **1** | |
| | | **At room temperature** | | *standard service calibration: 216989* | | | | | | | | | | | | | | | | | ***2*** | |
| | | | | | | | | | | | | | | | | | | | | | TOTAL | |
| | | | | | | | | | | | | | | | | | | | | | QTY | |
| | | | | | | | | | | | | | | | | | | | | | TOTAL VALUE | |

**Selections in bold are included in the prices of the basic versions.**
*Selections in italic are available at an extra price.*

**Options and accessories:**

| | |
|---|---|
| *238607* | *USB Service cable* |
| *ASM211103-A* | *Rain Shield* |
| *231865* | Vaporized hydrogen peroxide (VHP) filter |

Example of order code with typical settings:

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **HMT310** | **1** | **B** | **5** | **A** | **1** | **B** | **C** | **C** | **1** | **4** | **B** | **P** | **F** | **A** | **1** | **A** | **2** |

End customer: _____

VAISALA

**Order form**
Purchaser _____

Valid from June 2016
Order no. _____

# HMT318 Humidity and Temperature Transmitter

## For pressurized pipelines

| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | PRICE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Vaisala HUMICAP® Humidity and Temperature Transmitter** | | **HMT310** | **8** | | | **A** | | | | | | | | | | | **1** | | | |
| **1** | **Transmitter type** | **HMT318** | | **8** | | | | | | | | | | | | | | | | | |
| | | ***RH+T+Td+Tdf+a+x+Tw+ppm+pw+pws+h*** | | | ***B*** | | | | | | | | | | | | | | | | |
| **3** | **Mounting plate** | **Standard mounting plate (recommended choice)** | | | | **5** | | | | | | | | | | | | | | | |
| | | **Mounting plate without flange (not for outdoor use)** | | | | **6** | | | | | | | | | | | | | | | |
| **4** | **Power supply** | **24 VDC** | | | | | **A** | | | | | | | | | | | | | | |
| **5** | **Analog output signal** | **Analog output channel (Ch1&Ch2)** | **4... 20 mA & RS232C** | | | | | **1** | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | **0... 20 mA & RS232C** | | | | | **2** | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | **1... 5 V & RS232C** | | | | | **J** | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | **0... 5 V & RS232C** | | | | | **4** | | | | | | | | | | | | | |
| | | **Analog output channel (Ch1&Ch2)** | **0... 10 V & RS232C** | | | | | **5** | | | | | | | | | | | | | |
| **6** | **Analog output parameters** | **No analog outputs** | | | | | | | **A** | **A** | | | | | | | | | | | |
| **7** | **for Ch1 and Ch2** | **RH** | **(0... 100%RH)** | | | | | | **B** | **B** | | | | | | | | | | | |
| | | **Temperature** | **(choose T range below)** | | | | | | **C** | **C** | | | | | | | | | | | |
| | | **ppm (0…5000)** | **(0…5000)** | | | | | | **J** | **J** | | | | | | | | | | | |
| | | **pw (0…1000 hPa)** | **(0…14.5 psi)** | | | | | | **K** | **K** | | | | | | | | | | | |
| | | **pws (0…1000 hPa)** | **(0…14.5 psi)** | | | | | | **L** | **L** | | | | | | | | | | | |
| | | **h (-40...1500 kJ/kg)** | ***(-9.5...+652.6 Btu/lb)*** | | | | | | **M** | **M** | | | | | | | | | | | |
| | | **Td (-40...100°C)** | **(-40...212°F)** | | | | | | **N** | **N** | | | | | | | | | | | |
| | | **Tdf (-40...100°C)** | **(-40...212°F)** | | | | | | **P** | **P** | | | | | | | | | | | |
| | | **a (0...500 g/m3)** | **(0...218.5 gr/ft3)** | | | | | | **Q** | **Q** | | | | | | | | | | | |
| | | **x (0...500 g/kg d.a)** | **(0...3500 gr/lb)** | | | | | | **R** | **R** | | | | | | | | | | | |
| | | **Tw (0...100°C)** | **(+32...+212°F)** | | | | | | **S** | **S** | | | | | | | | | | | |
| | SPECIAL: | Parameters | CH1:_____ CH2:_____ | | | | | | **X** | **X** | | | | | | | | | | | |
| | NOTE: | Scale for parameters | CH1:_____ CH2:_____ | | | | | | | | | | | | | | | | | | |
| | - Choose A for both channels | | **Ch1** | | | | | | | | | | | | | | | | | | |
| | when you don't use analog outputs | | **Ch2** | | | | | | | | | | | | | | | | | | |
| **8** | **Analog output range** | **No range** | | | | | | | | | **A** | | | | | | | | | | |
| | **for temperature** | **-60…+60°C** | **(-76…140°F)** | | | | | | | | **B** | | | | | | | | | | |
| | | **-40...+60°C** | **(-40...+140°F)** | | | | | | | | **C** | | | | | | | | | | |
| | | **-40...+120°C** | **(-40...+248°F)** | | | | | | | | **D** | | | | | | | | | | |
| | | **-40...+180°C** | **(-40...+356°F)** | | | | | | | | **E** | | | | | | | | | | |
| | | **-20...+60°C** | **(-4...+140°F)** | | | | | | | | **F** | | | | | | | | | | |
| | | **-20...+80°C** | **(-4...+176°F)** | | | | | | | | **G** | | | | | | | | | | |
| | | **-20...+120°C** | **(-4...+248°F)** | | | | | | | | **H** | | | | | | | | | | |
| | | **0...+60°C** | **(+32...+140°F)** | | | | | | | | **J** | | | | | | | | | | |
| | **NOTE:** | **0...+100°C** | **(+32...+ 212°F)** | | | | | | | | **K** | | | | | | | | | | |
| | **- Choose A when T** | **0...+120°C** | **(+32...+248°F)** | | | | | | | | **M** | | | | | | | | | | |
| | **is not desired** | **special range : _____ °C/°F** | | | | | | | | | **X** | | | | | | | | | | |
| **9** | **Output units** | **Metric** | | | | | | | | | | **1** | | | | | | | | | |
| | | **Non-metric** | | | | | | | | | | **2** | | | | | | | | | |
| **10** | **Cable connector** | *8-pole connector with 5m cable* | *spare 5 m cable: 212142* | | | | | | | | | | *4* | | | | | | | | |
| | | *8-pole connector with 10 m cable* | *spare 10 m cable: 210964SP* | | | | | | | | | | *7* | | | | | | | | |
| | | *8-pole counter connector* | | | | | | | | | | | *5* | | | | | | | | |
| **11** | **Operating manual** | **No manual** | | | | | | | | | | | | **A** | | | | | | | |
| | **language** | **English** | | | | | | | | | | | | **B** | | | | | | | |
| | | **German** | | | | | | | | | | | | **C** | | | | | | | |
| | | **Japanese** | see latest manuals online: www.vaisala.com/hmt310 | | | | | | | | | | | **D** | | | | | | | |
| **12** | **Probe cable length** | **2 m cable for standard probe** | | | | | | | | | | | | | **S** | | | | | | |
| | | *5 m cable for standard probe* | | | | | | | | | | | | | *T* | | | | | | |
| | | *10 m cable for standard probe* | | | | | | | | | | | | | *U* | | | | | | |
| | | *2 m cable for long probe* | | | | | | | | | | | | | *V* | | | | | | |
| | | *5 m cable for long probe* | | | | | | | | | | | | | *W* | | | | | | |
| | | *10 m cable for long probe* | | | | | | | | | | | | | *Z* | | | | | | |
| **13** | **Humidity sensor type** | **General purpose** | **HUMICAP180R** | | | | | | | | | | | | | **A** | | | | | |
| | | *Chemical purge* | *HUMICAP180RC* | | | | | | | | | | | | | *D* | | | | | |
| | | *Catalytic humicap sensor* | *HUMICAP180VHP* | | | | | | | | | | | | | *J* | | | | | |
| | | *Catalytic humicap sensor with chemical purge* | *HUMICAP180VHPC* | | | | | | | | | | | | | *K* | | | | | |
| **14** | **Sensor protection** | **PPS plastic grid & stainless steel netting** | *spare: DRW010281SP* | | | | | | | | | | | | | | **A** | | | | |
| | | **PPS plastic grid** | *spare: DRW010276SP* | | | | | | | | | | | | | | **B** | | | | |
| | | **Sintered stainless steel filter** | *spare: HM47280SP* | | | | | | | | | | | | | | **C** | | | | |
| **15** | **No additional temperature probe** | | | | | | | | | | | | | | | | | **1** | | | |
| **16** | **Installation kit** | **Pressure fitting ISO 1/2"** | *spare: DRW212076SP* | | | | | | | | | | | | | | | | **M** | | |
| | | **Pressure fitting NPT 1/2"** | *spare: 212810SP* | | | | | | | | | | | | | | | | **N** | | |
| | | *Ball valve set (ISO1/2") for HMT318* | *spare: BALLVALVE-1* | | | | | | | | | | | | | | | | *E* | | |
| **17** | **Calibration certificate** | **No certificate** | | | | | | | | | | | | | | | | | | **1** | |
| | | **At room temperature** | *standard service calibration: 216989* | | | | | | | | | | | | | | | | | ***2*** | |
| | | | | | | | | | | | | | | | | | | | | TOTAL | |
| | | | | | | | | | | | | | | | | | | | | QTY | |
| | | | | | | | | | | | | | | | | | | | | TOTAL VALUE | |

**Selections in bold are included in the prices of the basic versions.**
*Selections in italic are available at an extra price.*

**Options and accessories:**

| | |
|---|---|
| *238607* | *USB Service cable* |
| *ASM211103-A* | *Rain Shield* |
| *231865* | Vaporized hydrogen peroxide (VHP) filter |

Example of order code with typical settings:

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **HMT310** | **1** | **B** | **5** | **A** | **1** | **B** | **C** | **C** | **1** | **4** | **B** | **S** | **A** | **A** | **1** | **M** | **2** |

End customer: _____

**VAISALA**

**Order form**
Purchaser _____

Valid from June 2016
Order no. _____

# HMT310 Humidity and Temperature Transmitter series
## All models

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | |
| **Vaisala HUMICAP® Humidity and Temperature Transmitter** | | | **HMT310** | | | | | | | **A** | | | | | | | | | | | **1** | | | PRICE |
| **1 Transmitter type** | *Wall mount transmitter* | | | | | | *1* | | | | | | | | | | | | | | | | | |
| | *Probe for general use* | | | | | | *3* | | | | | | | | | | | | | | | | | |
| | *Probe for pressurized processes* | | | | | | *4* | | | | | | | | | | | | | | | | | |
| | *Probe for high temperatures* | | | | | | *5* | | | | | | | | | | | | | | | | | |
| | *Probe for high humidities* | | | | | | *7* | | | | | | | | | | | | | | | | | |
| | *Probe with extended heating for fuel cells* | | | | | | *F* | | | | | | | | | | | | | | | | | |
| | *Probe for pressurized pipelines* | | | | | | *8* | | | | | | | | | | | | | | | | | |
| | ***RH+T+Td+Tdf+a+x+Tw+ppm+pw+pws+h*** | | | | | | | ***B*** | | | | | | | | | | | | | | | | |
| | ***Td+Tdf+x*** | ***with warmed RH probe*** | | | | | | ***C*** | | | | | | | | | | | | | | | | |
| **3 Mounting plate** | **Standard mounting plate (recommended choice)** | | | | | | | | **5** | | | | | | | | | | | | | | | |
| | **Mounting plate without flange (not for outdoor use)** | | | | | | | | **6** | | | | | | | | | | | | | | | |
| **4 Power supply** | **24 VDC** | | | | | | | | | **A** | | | | | | | | | | | | | | |
| **5 Analog output signal** | **Analog output channel (Ch1&Ch2)** | **4... 20 mA & RS232C** | | | | | | | | | **1** | | | | | | | | | | | | | |
| | **Analog output channel (Ch1&Ch2)** | **0... 20 mA & RS232C** | | | | | | | | | **2** | | | | | | | | | | | | | |
| | **Analog output channel (Ch1&Ch2)** | **1... 5 V & RS232C** | | | | | | | | | **J** | | | | | | | | | | | | | |
| | **Analog output channel (Ch1&Ch2)** | **0... 5 V & RS232C** | | | | | | | | | **4** | | | | | | | | | | | | | |
| | **Analog output channel (Ch1&Ch2)** | **0... 10 V & RS232C** | | | | | | | | | **5** | | | | | | | | | | | | | |
| **6 Analog output parameters** | **No analog outputs** | | | | | | | | | | | **A** | **A** | | | | | | | | | | | |
| **7 for Ch1 and Ch2** | **RH** | **(0... 100%RH)** | *all probes* | | | | | | | | | **B** | **B** | | | | | | | | | | | |
| | **Temperature** | **(choose T range below)** | *all probes* | | | | | | | | | **C** | **C** | | | | | | | | | | | |
| | **Td (-40…60°C)** | **(-40…140°F)** | *for HMP301 probe* | | | | | | | | | **D** | **D** | | | | | | | | | | | |
| | **Tdf (-40…60°C)** | **(-40…140°F)** | *for HMP301 probe* | | | | | | | | | **E** | **E** | | | | | | | | | | | |
| | **a (0...160 g/m3)** | **(0…69.9 gr/ft3)** | *for HMP301 probe* | | | | | | | | | **F** | **F** | | | | | | | | | | | |
| | **x (0...160 g/kg d.a)** | **(0…1120 gr/lb)** | *for HMP301 probe* | | | | | | | | | **G** | **G** | | | | | | | | | | | |
| | **Tw (0…60°C)** | **(+32...+140°F)** | *for HMP301 probe* | | | | | | | | | **H** | **H** | | | | | | | | | | | |
| | **ppm (0…5000)** | **(0…5000)** | *all probes* | | | | | | | | | **J** | **J** | | | | | | | | | | | |
| | **pw (0…1000 hPa)** | **(0…14.5 psi)** | *all probes* | | | | | | | | | **K** | **K** | | | | | | | | | | | |
| | **pws (0…1000 hPa)** | **(0…14.5 psi)** | *all probes* | | | | | | | | | **L** | **L** | | | | | | | | | | | |
| | **h (-40...1500 kJ/kg)** | ***(-9.5...+652.6 Btu/lb)*** | *all probes* | | | | | | | | | **M** | **M** | | | | | | | | | | | |
| | **Td (-40...100°C)** | **(-40...212°F)** | *HMP303/304/305/306/307/308* | | | | | | | | | **N** | **N** | | | | | | | | | | | |
| | **Tdf (-40...100°C)** | **(-40...212°F)** | *HMP303/304/305/306/307/308* | | | | | | | | | **P** | **P** | | | | | | | | | | | |
| | **a (0...500 g/m3)** | **(0...218.5 gr/ft3)** | *HMP303/304/305/306/307/308* | | | | | | | | | **Q** | **Q** | | | | | | | | | | | |
| | **x (0...500 g/kg d.a)** | **(0...3500 gr/lb)** | *HMP303/304/305/306/307/308* | | | | | | | | | **R** | **R** | | | | | | | | | | | |
| | **Tw (0...100°C)** | **(+32...+212°F)** | *HMP303/304/305/306/307/308* | | | | | | | | | **S** | **S** | | | | | | | | | | | |
| SPECIAL: | Parameters | CH1:_____ | CH2:_____ | | | | | | | | | **X** | **X** | | | | | | | | | | | |
| NOTE: | Scale for parameters | CH1:_____ | CH2:_____ | | | | | | | | | | | | | | | | | | | | | |
| - Choose A for both channels | | | **Ch1** | | | | | | | | | | | | | | | | | | | | | |
| when you don't use analog outputs | | | **Ch2** | | | | | | | | | | | | | | | | | | | | | |
| **8 Analog output range** | **No range** | | | | | | | | | | | | | **A** | | | | | | | | | | |
| **for temperature** | **-60…+60°C** | **(-76…140°F)** | | | | | | | | | | | | **B** | | | | | | | | | | |
| | **-40...+60°C** | **(-40...+140°F)** | | | | | | | | | | | | **C** | | | | | | | | | | |
| | **-40...+120°C** | **(-40...+248°F)** | | | | | | | | | | | | **D** | | | | | | | | | | |
| | **-40...+180°C** | **(-40...+356°F)** | | | | | | | | | | | | **E** | | | | | | | | | | |
| | **-20...+60°C** | **(-4...+140°F)** | | | | | | | | | | | | **F** | | | | | | | | | | |
| | **-20...+80°C** | **(-4...+176°F)** | | | | | | | | | | | | **G** | | | | | | | | | | |
| | **-20...+120°C** | **(-4...+248°F)** | | | | | | | | | | | | **H** | | | | | | | | | | |
| | **0...+60°C** | **(+32...+140°F)** | | | | | | | | | | | | **J** | | | | | | | | | | |
| **NOTE:** | **0...+100°C** | **(+32...+ 212°F)** | | | | | | | | | | | | **K** | | | | | | | | | | |
| **- Choose A when T** | **0...+120°C** | **(+32...+248°F)** | | | | | | | | | | | | **M** | | | | | | | | | | |
| **is not desired** | **special range : _____°C/°F** | | | | | | | | | | | | | **X** | | | | | | | | | | |
| **9 Output units** | **Metric** | | | | | | | | | | | | | | **1** | | | | | | | | | |
| | **Non-metric** | | | | | | | | | | | | | | **2** | | | | | | | | | |
| **10 Cable connector** | *8-pole connector with 5m cable* | | *spare 5 m cable: 212142* | | | | | | | | | | | | | *4* | | | | | | | | |
| | *8-pole connector with 10 m cable* | | *spare 10 m cable: 210964SP* | | | | | | | | | | | | | *7* | | | | | | | | |
| | *8-pole counter connector* | | | | | | | | | | | | | | | *5* | | | | | | | | |
| **11 Operating manual** | **No manual** | | | | | | | | | | | | | | | | **A** | | | | | | | |
| **language** | **English** | | | | | | | | | | | | | | | | **B** | | | | | | | |
| | **German** | | | | | | | | | | | | | | | | **C** | | | | | | | |
| | **Japanese** | see latest manuals online: www.vaisala.com/hmt310 | | | | | | | | | | | | | | | **D** | | | | | | | |
| **12 Probe type** | **HMP301** | | | | | | | | | | | | | | | | | **A** | | | | | | |
| | **HMP303** | **with 2 m cable, +80°C** | | | | | | | | | | | | | | | | **B** | | | | | | |
| | | *with 5 m cable, +80°C* | | | | | | | | | | | | | | | | *C* | | | | | | |
| | | *with 10 m cable, +80°C* | | | | | | | | | | | | | | | | *D* | | | | | | |
| | | **with 2 m cable, +120°C** | | | | | | | | | | | | | | | | **5** | | | | | | |
| | | *with 5 m cable, +120°C* | | | | | | | | | | | | | | | | *6* | | | | | | |
| | | *with 10 m cable, +120°C* | | | | | | | | | | | | | | | | *7* | | | | | | |
| | **HMP304** | **with 2 m cable** | | | | | | | | | | | | | | | | **E** | | | | | | |
| | | *with 5 m cable* | | | | | | | | | | | | | | | | *F* | | | | | | |
| | | *with 10 m cable* | | | | | | | | | | | | | | | | *G* | | | | | | |
| | **HMP305** | **with 2 m cable** | | | | | | | | | | | | | | | | **H** | | | | | | |
| | | *with 5 m cable* | | | | | | | | | | | | | | | | *J* | | | | | | |
| | | *with 10 m cable* | | | | | | | | | | | | | | | | *K* | | | | | | |
| | **HMP307** | **with 2 m cable** | | | | | | | | | | | | | | | | **P** | | | | | | |
| | | *with 5 m cable* | | | | | | | | | | | | | | | | *Q* | | | | | | |
| | | *with 10 m cable* | | | | | | | | | | | | | | | | *R* | | | | | | |
| | **HMP308** | **with 2 m cable** | 178 mm probe | | | | | | | | | | | | | | | **S** | | | | | | |
| | | *with 5 m cable* | 178 mm probe | | | | | | | | | | | | | | | *T* | | | | | | |
| | | *with 10 m cable* | 178 mm probe | | | | | | | | | | | | | | | *U* | | | | | | |
| | | *with 2 m cable* | *400 mm probe* | | | | | | | | | | | | | | | *V* | | | | | | |
| | | *with 5 m cable* | *400 mm probe* | | | | | | | | | | | | | | | *W* | | | | | | |
| | | *with 10 m cable* | *400 mm probe* | | | | | | | | | | | | | | | *Z* | | | | | | |
| **13 Humidity sensor type** | **General purpose** | | **HUMICAP180R** | | | | | | | | | | | | | | | | **A** | | | | | |
| | *Chemical purge* | | *HUMICAP180RC* | | | | | | | | | | | | | | | | *D* | | | | | |
| | *Warmed probe with chemical purge* | | *HUMICAP180RC* | *HMT317* | | | | | | | | | | | | | | | *F* | | | | | |
| | *Warmed probe with start-up purge only* | | *HUMICAP180RC* | *HMT317* | | | | | | | | | | | | | | | *G* | | | | | |
| | *Catalytic humicap sensor* | | *HUMICAP180VHP* | | | | | | | | | | | | | | | | *J* | | | | | |
| | *Catalytic humicap sensor with chemical purge* | | *HUMICAP180VHPC* | | | | | | | | | | | | | | | | *K* | | | | | |
| | *Warmed probe without purge* | | *HUMICAP180RC* | *HMT317 fuel cells (F model)* | | | | | | | | | | | | | | | *E* | | | | | |
| **14 Sensor protection** | **PPS plastic grid & stainless steel netting** | | recommended for HMP303 and HMP307 | | | | | | | | | | | | | | | | | **A** | | | | |
| | **PPS plastic grid** | | recommended for HMP301 | | | | | | | | | | | | | | | | | **B** | | | | |
| | **Sintered stainless steel filter** | | recommended for HMP304/305/308 | | | | | | | | | | | | | | | | | **C** | | | | |
| | *Membrane SST filter* | | recommended for HMT317 F /fuel cell applications | | | | | | | | | | | | | | | | | *G* | | | | |
| **15 No additional temperature probe** | | | | | | | | | | | | | | | | | | | | | **1** | | | |
| **16 Installation kit** | **No kit** | | | | | | | | | | | | | | | | | | | | | **A** | | |
| | *Duct installation kit for HMP303 and HMP307* | | | | | | | | | | | | | | | | | | | | | *B* | | |
| | *Mounting flange for HMP305* | | | | | | | | | | | | | | | | | | | | | *D* | | |
| | *Ball valve set for HMP308* | | | | | | | | | | | | | | | | | | | | | *E* | | |
| | *ISO 3/8 Swagelok® connector for HMP307* | | | | | | | | | | | | | | | | | | | | | *G* | | |
| | *NPT 1/2" Swagelok® connector for HMP307* | | | | | | | | | | | | | | | | | | | | | *H* | | |
| | *Cable gland Agro, M20x1.5 for HMP303 and HMP307* | | | | | | | | | | | | | | | | | | | | | *J* | | |
| | *Fitting body M22 x 1,5 FOR HMP304* | | | | | | | | | | | | | | | | | | | | | *K* | | |
| | *Fitting body NPT 1/2" for HMP304* | | | | | | | | | | | | | | | | | | | | | *L* | | |
| | *Pressure fitting ISO1/2" FOR HMP308* | | | | | | | | | | | | | | | | | | | | | *M* | | |
| | *Pressure fitting NPT1/2" for HMP308* | | | | | | | | | | | | | | | | | | | | | *N* | | |
| **17 Calibration certificate** | **No certificate** | | | | | | | | | | | | | | | | | | | | | | **1** | |
| | **At room temperature** | | | | | | | | | | | | | | | | | | | | | | ***2*** | |
| | | | | | | | | | | | | | | | | | | | | | | | TOTAL | |
| | | | | | | | | | | | | | | | | | | | | | | | QTY | |
| | | | | | | | | | | | | | | | | | | | | | | | TOTAL VALUE | |

**Selections in bold are included in the prices of the basic versions.**
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**Options and accessories:**

| | |
|---|---|
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| *ASM211103-A* | *Rain Shield* |
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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **HMT310** | **1** | **B** | **5** | **A** | **1** | **B** | **C** | **C** | **1** | **4** | **B** | **A** | **A** | **A** | **1** | **A** | **2** |

End customer: _____