

VAISALA

Order form	Valid from May 2019	
Purchaser	Order no	

Vaisala HUMICAP® Humidity and Temperature Module HMM170

umidity Module		HMM170				5 6		PRICE
Output signals	RS485 digital output only (Modbus F 4 20 mA (3.6 mA when in error state)		1 2					
Digital output always	4 20 mA (21 mA when in error state)		ا ه					
included	0 20 mA (21 mA when in error state)		-	7	က			
Included			5 2	Channel 3	Channel :		ı	
analag autnuta aan ahuaya	0 10 V (10.3 V when in error state)		ءًاءُ	≧	Ĭ		ı	
analog outputs can always	0 5 V (5.5 V when in error state)		Chan	اچ	ξĺ		ı	
be activated and	1 5 V (5.5 V when in error state)		10	۱۲ ا	J		ı	
reconfigured afterwards	0 1 V (1.1 V when in error state)		8 ↓				ı	
Parameter and scaling	No analog output (select 'AAA' if only	· /		_ <u>A</u>			ı	
for analog output	Td/f with warmed probe default*	0 +100 °C (+32 +212 °F)	В				ı	
4 channels 1, 2, 3	Td/f with warmed probe default*	-20+100 °C (-4+212 °F)	С				ı	
	Dewpoint/frostpoint (Td/f) output	0 +100 °C (+32 +212 °F)	D		D		ı	
	Relative Humidity (RH)	0 100 % RH		E			ı	
	Т	0 +180 °C (+32 +356 °F)	F				ı	
	Т	-70 +180 °C (-94 +356 °F)	G		G		1	
	Т	0 +100 °C (+32 +212 °F)	Н	Н	н			
CUSTOMER FREE SCALE	Td/f (between -80 +100 °C, metric)	Scale :	J	J	J			
	T (between -100 +200 °C, metric)	Scale :	Κ	K	K		ı	
	Td/f (between -120 +212 °F, non-metric)	Scale:	L	L	L		ı	
	T (between -148 392°F, non-metric)	Scale:	М	М	М			
For moisture in oi	Water activity (aw)	0 1	R	R	R			
For moisture in oi	Relative saturation (% RS)	0 100 % RS	s	s	s			
Mineral transformer oil only	/ PPM _{weight}	0100 ppm	Т	Т	Т			
CUSTOMER FREE SCALE	PPM volume	Scale: (0 10 ⁷ ppm)	X	X	x			
	Mixing ratio (x)	Scale: (0 10 ³ g/kg)	Υ	Y	Y		ı	
	Absolute humidity	Scale: (0 10 ³ g/m ³)	_Z	Ζ	Z			
*NOTE: When warmed pr	obe is enabled, only dew/frost point (nts					
erroneous RH an	d T outputs. Probe warming can be m. Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft	t cable (-70 °C +180 °C) cable (-70 °C +180 °C)				1 2		
erroneous RH an Probe type and cable length	Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft Stainless steel probe with 10 m / 32.8 f	t cable (-70 °C +180 °C) cable (-70 °C +180 °C) t cable (-70 °C +180 °C)				- 1		
erroneous RH an Probe type and cable length	Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft	t cable (-70 °C +180 °C) cable (-70 °C +180 °C) t cable (-70 °C +180 °C)	R2C	<u> </u>		2 3 A		
erroneous RH an Probe type and cable length	Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft Stainless steel probe with 10 m / 32.8 f	t cable (-70 °C +180 °C) cable (-70 °C +180 °C) t cable (-70 °C +180 °C)				2 3 A B		
erroneous RH an Probe type and cable length Humidity sensor type	Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft Stainless steel probe with 10 m / 32.8 f Purge on every start-up and after ev	t cable (-70 °C +180 °C) cable (-70 °C +180 °C) ft cable (-70 °C +180 °C) ery 24 hours HUMICAP® HUMICAP®	R2C	:		2 3 A B C		
erroneous RH an Probe type and cable length Humidity sensor type	Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft Stainless steel probe with 10 m / 32.8 ft Purge on every start-up and after every purge on every start-up only	t cable (-70 °C +180 °C) cable (-70 °C +180 °C) ft cable (-70 °C +180 °C) ery 24 hours HUMICAP® HUMICAP®	R2C	; ;		2 3 A B C		
erroneous RH an Probe type and cable length Humidity sensor type	Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft Stainless steel probe with 10 m / 32.8 f Purge on every start-up and after eve Purge on every start-up only No purge (manual purge is still possible)	t cable (-70 °C +180 °C) cable (-70 °C +180 °C) ft cable (-70 °C +180 °C) ery 24 hours HUMICAP® HUMICAP® HUMICAP® HUMICAP® HUMICAP®	R2C R2C 180	: : L2		2 3 A B C		
Probe type and cable length Humidity sensor type and chemical purge	Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft Stainless steel probe with 10 m / 32.8 f Purge on every start-up and after eve Purge on every start-up only No purge (manual purge is still possible Moisture in oil sensor	t cable (-70 °C +180 °C) cable (-70 °C +180 °C) ft cable (-70 °C +180 °C) ery 24 hours HUMICAP® HUMICAP® HUMICAP® HUMICAP® HUMICAP® HUMICAP®	R2C R2C 1801	; ; L 2 VC		2 3 A B C		
Probe type and cable length Humidity sensor type and chemical purge	Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft Stainless steel probe with 10 m / 32.8 f Purge on every start-up and after ev Purge on every start-up only No purge (manual purge is still possibl Moisture in oil sensor H ₂ O ₂ tolerant sensor with start-up and	ft cable (-70 °C +180 °C) cable (-70 °C +180 °C) ft cable (-70 °C +180 °C) ery 24 hours HUMICAP® HUMICAP® HUMICAP® HUMICAP® d 24h purge HUMICAP® (spare: DRI	R2C R2C 180I 180I	L 2 VC 281	SP)	2 3 A B C		
Probe type and cable length Humidity sensor type and chemical purge	Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft Stainless steel probe with 10 m / 32.8 f Purge on every start-up and after every on the start of the start	t cable (-70 °C +180 °C) cable (-70 °C +180 °C) ft cable (-70 °C +180 °C) ft cable (-70 °C +180 °C) HUMICAP® HUMICAP® HUMICAP® HUMICAP® Tal purpose) Sum pore size (spare: HM-	R2C R2C 180I 180I W010 47280	L 2 VC 281 (SP)	SP)	2 3 A B C	1	
Probe type and cable length Humidity sensor type and chemical purge	Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft Stainless steel probe with 10 m / 32.8 f Purge on every start-up and after every e	it cable (-70 °C +180 °C) cable (-70 °C +180 °C) ft cable (-70 °C +180 °C) HUMICAP® HUMICAP® HUMICAP® HUMICAP® ral purpose) (spare: DRI 3 um pore size (spare: HM-	R2C R2C 1801 1801 W010 47280 4528	: L 2 VC 281: DSP) P)	SP)	2 3 A B C	1 2 3	
erroneous RH and cable length Humidity sensor type and chemical purge	Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft Stainless steel probe with 10 m / 32.8 f Purge on every start-up and after ev Purge on every start-up only No purge (manual purge is still possibl Moisture in oil sensor H ₂ O ₂ tolerant sensor with start-up and PPS with stainless steel mesh (gene Sintered stainless steel filter with 38 Sintered PTFE filter with 20 um pore Stainless steel filter for moisture in o	it cable (-70 °C +180 °C) cable (-70 °C +180 °C) ft cable (-70 °C +180 °C) ft cable (-70 °C +180 °C) ft cable (-70 °C +180 °C) HUMICAP® HUMICAP® HUMICAP® HUMICAP® HUMICAP® Tal purge (spare: DRI S um pore size (spare: HM:	R2C R2C 1801 1801 W010 47280 4528	: L 2 VC 281: DSP) P)	SP)	2 3 A B C	1 2	
erroneous RH an Probe type and cable length Humidity sensor type	Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft Stainless steel probe with 10 m / 32.8 f Purge on every start-up and after every e	it cable (-70 °C +180 °C) cable (-70 °C +180 °C) ft cable (-70 °C +180 °C) HUMICAP® HUMICAP® HUMICAP® HUMICAP® ral purpose) (spare: DRI 3 um pore size (spare: HM-	R2C R2C 1801 1801 W010 47280 4528	: L 2 VC 281: DSP) P)	SP)	A B C D	1 2 3 4	
erroneous RH and cable length Humidity sensor type and chemical purge Sensor protection Product identity	Stainless steel probe with 2 m / 6.5 f Stainless steel probe with 5 m / 16.4 ft Stainless steel probe with 10 m / 32.8 f Purge on every start-up and after ev Purge on every start-up only No purge (manual purge is still possibl Moisture in oil sensor H ₂ O ₂ tolerant sensor with start-up and PPS with stainless steel mesh (gene Sintered stainless steel filter with 38 Sintered PTFE filter with 20 um pore Stainless steel filter for moisture in o	ft cable (-70 °C +180 °C) cable (-70 °C +180 °C) ft cable (-70 °C +180 °C) ery 24 hours HUMICAP® HUMICAP® HUMICAP® HUMICAP® HUMICAP® Galpurpose) gumpore size (spare: DRI size (spare: HM- size (spare: HM- spare: HM- spare: HM- spare: HM- spare: HM- spare: HM- spare: HM-	R2C R2C 1801 1801 W010 47280 4528	: L 2 VC 281: DSP) P)	SP)	2 3 A B C	1 2 3 4	

Example of order code with typical settings for RH&T measurement: HMM170 2 E G A 1 A 1 A 1 A Example of order code with typical settings for dew point measurement: HMM170 2 C C C 1 A 1 A 1 A Example of order code with typical settings for moisture in oil measurement: HMM170 2 J J K L 1 D 4 A

Accessories:

219690 USB cable for PC connection

219980 HM70 Hand-held connection cable

HMP247CG Feedthrough SWG12NPT12 Swagelok NPT1/2" Pressure-tight Installation Adapter for Probe SWG12ISO12 Swagelok ISO 1/2" Pressure-tight Installation Adapter for Probe

210697 Duct installation kit for probe

226067 Probe Mounting Clamp Set (10 pcs)

Spare parts:

DRW010281SP PPS Plastic grid & stainless steel netting

HM47280SP Stainless steel sintered filter
219452SP Sintered PTFE filter with 20 um pore size

HM47453SP Stainless steel filter for moisture in oil and vacuum