DORGEAN
Beijing Dorgean Electronic Technology Co.,Ltd

Instrument Expert
Original factory packaging
www.dorgean.com

VAISALA

Order form		Valid from May 2019
Purchaser		Order no

Vaisala HUMICAP® Humidity and Temperature Module HMM170

				1 2 3 4 5 6 7 8		PRICE
Humidity Module			HMM170			
1 **Output signals**	RS485 digital output only (Modbus RTU / RS485 in use)			1		
	4... 20 mA (3.6 mA when in error state)			2		
Digital output always	4... 20 mA (21 mA when in error state)			3		
included	0... 20 mA (21 mA when in error state)			4		
	0... 10 V (10.3 V when in error state)			5		
analog outputs can always	0... 5 V (5.5 V when in error state)			6		
be activated and	1... 5 V (5.5 V when in error state)			7		
reconfigured afterwards	0... 1 V (1.1 V when in error state)			8		

Column headers for positions: Channel 1, Channel 2, Channel 3

				Ch 1	Ch 2	Ch 3
2 **Parameter and scaling**	**No analog output** (select 'AAA' if only digital output is wished)			A	A	A
3 **for analog output**	Td/f with warmed probe default*	0... +100 °C (+32... +212 °F)		B	B	B
4 **channels 1, 2, 3**	Td/f with warmed probe default*	-20...+100 °C (-4...+212 °F)		C	C	C
	Dewpoint/frostpoint (Td/f) output	0... +100 °C (+32... +212 °F)		D	D	D
	Relative Humidity (RH)	0... 100 % RH		E	E	E
	T	0... +180 °C (+32... +356 °F)		F	F	F
	T	-70... +180 °C (-94... +356 °F)		G	G	G
	T	0... +100 °C (+32... +212 °F)		H	H	H
CUSTOMER FREE SCALE	Td/f (between -80... +100 °C, metric)	Scale : _____		J	J	J
	T (between -100... +200 °C, metric)	Scale : _____		K	K	K
	Td/f (between -120... +212 °F, non-metric)	Scale: _____		L	L	L
	T (between -148... 392 °F, non-metric)	Scale: _____		M	M	M
For moisture in oil	**Water activity (aw)**	0... 1		R	R	R
For moisture in oil	**Relative saturation (% RS)**	0... 100 % RS		S	S	S
Mineral transformer oil only	**PPM$_{weight}$**	0...100 ppm		T	T	T
CUSTOMER FREE SCALE	PPM $_{volume}$	Scale: _____ (0... 10^7 ppm)		X	X	X
	Mixing ratio (x)	Scale: _____ (0... 10^3 g/kg)		Y	Y	Y
	Absolute humidity	Scale: _____ (0... 10^3 g/m^3)		Z	Z	Z

***NOTE:** When warmed probe is enabled, only dew/frost point (Td/f) output is possible. This prevents erroneous RH and T outputs. Probe warming can be manually set on/off afterwards.*

5 **Probe type and**	Stainless steel probe with 2 m / 6.5 ft cable (-70 °C... +180 °C)			1	
cable length	*Stainless steel probe with 5 m / 16.4 ft cable (-70 °C... +180 °C)*			2	
	Stainless steel probe with 10 m / 32.8 ft cable (-70 °C... +180 °C)			3	
6 **Humidity sensor type**	Purge on every start-up and after every 24 hours	HUMICAP® R2C		A	
and chemical purge	Purge on every start-up only	HUMICAP® R2C		B	
	No purge (manual purge is still possible)	HUMICAP® R2C		C	
	Moisture in oil sensor	HUMICAP® 180L2		D	
	H_2O_2 tolerant sensor with start-up and 24h purge	*HUMICAP® 180VC*		E	
7 **Sensor protection**	**PPS with stainless steel mesh** (general purpose)	(spare: DRW010281SP)		1	
	Sintered stainless steel filter with 38 um pore size	*(spare: HM47280SP)*		2	
	Sintered PTFE filter with 20 um pore size	*(spare: 219452SP)*		3	
	Stainless steel filter for moisture in oil and vacuum	*(spare: HM47453SP)*		4	
8 **Product identity**	Vaisala (default)			A	

	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.

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

End customer: _____

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