

HMP231 Humidity and Temperature Transmitter

For wall mounting

Industrial humidity and temperature transmitter			HMP231	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	PRICE
Transmitter type	RH+T <i>RH+T+Td</i> <i>RH+T+a+Tw+x</i> <i>RH+T+Td+a+Tw+x+h</i> <i>RH+T+h</i>	A B C D F																	
Display	no display <i>display on transmitter cover</i>		1 2																
Probe length	120 mm			A															
Power supply & connectors	24 V, no connectors <i>24 V, shared connector for power supply and analog outputs</i> Using serial interface: <i>24 V, connector for RS232C</i> <i>24 V, 2 connectors: RS232C and analog outputs+power supply</i> <i>24 V, 2 connectors shared for power supply and RS485</i>		0 4 8 9 9																
Serial interface	RS 232C <i>RS 485/RS 422</i> <i>current loop</i>				A B C														
Sensor protection	sintered stainless steel filter (16452) PPS plastic grid & stainless steel netting (16720HM) PPS plastic grid (16562)		1 2 3																
Analog output signals (Ch1 and Ch2)	4...20 mA 0...20 mA 0...1 V 0...5 V 0...10 V				A B C D E	A B C D E													
Parameters for the analog outputs (If available in the chosen transmitter type)	RH (0...100 %RH) T (range: see below) Td (-40...+60 °C) (-40...+140 °F) a (0...160 g/m3) (0...69.9 gr/ft3) Tw (0...+60 °C) (+32...+140 °F) x (0...160 g/kg d.a.) (0...1120 gr/lb) h (-40...+460 kJ/kg) (-17.2...+197.8 Btu/lb)					1 2 3 4 5 6 7	1 2 3 4 5 6 7												
Analog output range for temperature	-20...+60 °C (-4...+140 °F) -40...+60 °C (-40...+140 °F) 0...+60 °C (+32...+140 °F)							A B C											
Units (local display and serial interface)	metric non-metric							1 2											
Regaining option *) and sensor type	no regaining (HUMICAP K) regaining (HUMICAP KC)																		3 2
Manual language	No manual English German French Finnish																		A B C D E
TOTAL																			
QTY																			
TOTAL VALUE																			

*) Humidity sensor regaining can be used to reduce the effects of some chemical contaminants. If the regaining option is chosen, the sensor must be protected either with a sintered filter or with a PPS plastic grid with steel netting; the PPS plastic grid can not be used. For further information about this option, please see product data sheet or contact Your Vaisala representative.

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:

HMP231 A 1 A 0 A 1 A A 1 2 A 1 A 3 B

End customer: _____

HMP233 Humidity and Temperature Transmitter

With compact probe

Industrial humidity and temperature transmitter		HMP233											PRICE									
Transmitter type	RH+T <i>RH+T+Td</i> <i>RH+T+a+Tw+x</i> <i>RH+T+Td+a+Tw+x+h</i> <i>RH+T+h</i>	A <i>B</i> <i>C</i> <i>D</i> <i>F</i>																				
Display	no display <i>display on transmitter cover</i>	1 <i>2</i>																				
Probe cable length	2 m cable, +80 °C (176 °F) <i>5 m cable, +80 °C (176 °F)</i> <i>10 m cable, +80 °C (176 °F)</i> <i>2 m cable, +120 °C (+248 °F)</i> <i>5 m cable, +120 °C (+248 °F)</i> <i>10 m cable, +120 °C (+248 °F)</i>	A <i>B</i> <i>C</i> <i>D</i> <i>E</i> <i>F</i>																				
Power supply, alarm output & connectors	24 V, no connectors <i>115 V, no connectors</i> <i>230 V, no connectors</i> <i>24 V, + alarm output unit (no connectors)</i> <i>24 V, shared connector for power supply and analog outputs</i> <i>24 V, as above + alarm output unit not on connector</i> <i>115 V, connector for analog outputs</i> <i>230 V, connector for analog outputs</i>	0 <i>1</i> <i>2</i> <i>3</i> <i>4</i> <i>5</i> <i>6</i> <i>7</i>																				
Using serial interface:	<i>24 V, connector for RS232C</i> <i>24 V, 2 connectors: RS232C and analog outputs+power supply</i> <i>24 V, 2 connectors shared for power supply and RS485</i>	<i>8</i> <i>9</i> <i>9</i>																				
Serial interface	RS 232C <i>RS 485/RS 422</i> <i>current loop</i>	A <i>B</i> <i>C</i>																				
Sensor protection	PPS plastic grid & stainless steel netting (16720HM)	2																				
Analog output signals (Ch1 and Ch2)	4...20 mA 0...20 mA 0...1 V 0...5 V 0...10 V	A B C D E																				
Parameters for the analog outputs (If available in the chosen transmitter type)	RH (0...100 %RH) T (range: see below) Td (-40...+100 °C) (-40...+212 °F) a (0...600 g/m3) (0...262 gr/ft3) Tw (0...+100 °C) (+32...+212 °F) x (0...500 g/kg d.a.) (0...3500 gr/lb d.a.) h (-40...1500 kJ/kg) (-17.2...644.9 Btu/lb)	1 2 3 4 5 6 7																				
Analog output range for temperature	-20...+80 °C (-4...+176 °F) -20...+120 °C (-4...+248 °F) -40...+80 °C (-40...+176 °F) -40...+120 °C (-40...+248 °F) -40...+60 °C (-40...+140 °F) 0...+100 °C (+32...+212 °F)	A B C D E F																				
Units (local display and serial interface)	metric non-metric	1 2																				
Installation kit for duct mounting	no <i>yes: for +80 °C cable (+176 °F)</i> <i>yes: for +120 °C cable (+248 °F)</i>	A <i>B</i> <i>C</i>																				
Regaining option *) and sensor type	no regaining (HUMICAP K) <i>regaining (HUMICAP KC)</i>	3 <i>2</i>																				
Manual language	No manual English German French Finnish	A B C D E																				
															TOTAL							
															QTY							
															TOTAL VALUE							

*) Humidity sensor regaining can be used to reduce the effects of some chemical contaminants. If the regaining option is chosen, the sensor must be protected either with a sintered filter or with a PPS plastic grid with steel netting; the PPS plastic grid can not be used. Please note that if mains power (115/230V) is selected regaining cannot be used. For further information about this option, please see product data sheet or contact Your Vaisala representative.

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Example of order code with typical settings:

HMP233 A 1 A 0 A 2 A A 1 2 A 1 A 3 B

End customer: _____

HMP234 Humidity and Temperature Transmitter

With pressure tight high temperature probe

Industrial humidity and temperature transmitter			HMP234	1	A	PRICE
Transmitter type	RH+T <i>RH+T+Td</i> <i>RH+T+a+Tw+x</i>	A B C				
	<i>RH+T+Td+a+Tw+x+h</i> <i>RH+T+h</i>	D F				
Display	no display <i>display on transmitter cover</i>	1 2				
Probe cable length	2 m cable, +180 °C (+356 °F) <i>5 m cable, +180 °C (+356 °F)</i> <i>10 m cable, +180 °C (+356 °F)</i>	A B C				
Power supply, alarm output & connectors	24 V, no connectors <i>115 V, no connectors</i> <i>230 V, no connectors</i> <i>24 V, + alarm output unit (no connectors)</i> <i>24 V, shared connector for power supply and analog outputs</i> <i>24 V, as above + alarm output unit not on connector</i> <i>115 V, connector for analog outputs</i> <i>230 V, connector for analog outputs</i>	0 1 2 3 4 5 6 7				
Using serial interface:	<i>24 V, connector for RS232C</i> <i>24 V, 2 connectors: RS232C and analog outputs+power supply</i> <i>24 V, 2 connectors shared for power supply and RS485</i>	8 9 9				
Serial interface	RS 232C <i>RS 485/RS 422</i> <i>current loop</i>	A B C				
Sensor protection	sintered stainless steel filter (16452)	1				
Analog output signals (Ch1 and Ch2)	4...20 mA 0...20 mA 0...1 V 0...5 V 0...10 V		channel 1 channel 2	A B C D E	A B C D E	
Parameters for the analog outputs (Ch1 and Ch2)	RH (0...100 %RH) T (range: see below) Td (-40...+100 °C) (-40...+212 °F) a (0...600 g/m3) (0...+262 gr/ft3) Tw (0...+100 °C) (+32...+212 °F) x (0...500 g/kg d.a.) (0...3500 gr/lb d.a.) h (-40...1500 kJ/kg) (-17.2...644.9 Btu/lb)		channel 1 channel 2	1 2 3 4 5 6 7	1 2 3 4 5 6 7	
Analog output range for temperature	-20...+80 °C (-4...+176 °F) -20...+120 °C (-4...+248 °F) -20...+180 °C (-4...+356 °F) -40...+80 °C (-40...+176 °F) -40...+120 °C (-40...+248 °F) -40...+180 °C (-40...+356 °F)				A B C D E F	
Units (local display and serial interface)	metric non-metric				1 2	
Regaining option *) and sensor type	no regaining (HUMICAP K) <i>regaining (HUMICAP KC)</i>				A	3 2
Manual language	No manual English German French Finnish				A B C D E	
						TOTAL
						QTY
						TOTAL VALUE

*) Humidity sensor regaining can be used to reduce the effects of some chemical contaminants.
Please note that if mains power (115/230V) is selected regaining cannot be used.
For further information about this option, please see product data sheet or contact Your Vaisala representative.

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:

HMP234 A 1 A 0 A 1 A A 1 2 A 1 A 3 B

End customer: _____

HMP235 Humidity and Temperature Transmitter

With high temperature probe

Industrial humidity and temperature transmitter		HMP235											PRICE			
Transmitter type	RH+T <i>RH+T+Td RH+T+a+Tw+x</i> <i>RH+T+Td+a+Tw+x+h RH+T+h</i>	A B C D F														
Display	no display <i>display on transmitter cover</i>	1 2														
Probe cable length	2 m cable, +180 °C <i>(+356 °F)</i> <i>5 m cable, +180 °C</i> <i>(+356 °F)</i> <i>10 m cable, +180 °C</i> <i>(+356 °F)</i>	A B C														
Power supply, alarm output & connectors	24 V, no connectors <i>115 V, no connectors</i> <i>230 V, no connectors</i> <i>24 V, + alarm output unit (no connectors)</i> <i>24 V, shared connector for power supply and analog outputs</i> <i>24 V, as above + alarm output unit not on connector</i> <i>115 V, connector for analog outputs</i> <i>230 V, connector for analog outputs</i>	0 1 2 3 4 5 6 7														
Using serial interface:	<i>24 V, connector for RS232C</i> <i>24 V, 2 connectors: RS232C and analog outputs+power supply</i> <i>24 V, 2 connectors shared for power supply and RS485</i>	8 9 9														
Serial interface	RS 232C <i>RS 485/RS 422</i> <i>current loop</i>	A B C														
Sensor protection	sintered stainless steel filter (16452) PPS plastic grid & stainless steel netting (16720HM)	1 2														
Analog output signals (Ch1 and Ch2)	4...20 mA 0...20 mA 0...1 V 0...5 V 0...10 V <i>channel 1</i> <i>channel 2</i>	A B C D E	A B C D E													
Parameters for the analog outputs (If available in the chosen transmitter type)	RH <i>(0...100 %RH)</i> T <i>(range: see below)</i> Td <i>(-40...+100 °C)</i> <i>(-40...+212 °F)</i> a <i>(0...600 g/m3)</i> <i>(0...+262 gr/ft3)</i> Tw <i>(0...+100 °C)</i> <i>(+32...+212 °F)</i> x <i>(0...500 g/kg d.a.)</i> <i>(0...3500 gr/lb d.a.)</i> h <i>(-40...+1500 kJ/kg)</i> <i>(-17.2...644.9 Btu/lb)</i> <i>channel 1</i> <i>channel 2</i>	1 2 3 4 5 6 7	1 2 3 4 5 6 7													
Analog output range for temperature	-20...+180 °C <i>(-4...+356 °F)</i> 0...+180 °C <i>(+32...+356 °F)</i>	A B														
Units (local display and serial interface)	metric non-metric	1 2														
Installation kit	no installation kit <i>aluminium flange</i> <i>steel flange</i>	A B C														
Regaining option *) and sensor type	no regaining <i>(HUMICAP K)</i> <i>regaining</i> <i>(HUMICAP KC)</i>	3 2														
Manual language	No manual English German French Finnish	A B C D E														
TOTAL																
QTY																
TOTAL VALUE																

*) Humidity sensor regaining can be used to reduce the effects of some chemical contaminants. If the regaining option is chosen, the sensor must be protected either with a sintered filter or with a PPS plastic grid with steel netting; the PPS plastic grid can not be used. Please note that if mains power (115/230V) is selected regaining cannot be used. For further information about this option, please see product data sheet or contact Your Vaisala representative.

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Example of order code with typical settings:

HMP235	A	1	A	0	A	1	A	A	1	2	A	1	A	3	B
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End customer: _____

HMP237 Humidity and Temperature Transmitter

With compact probe for demanding environments

Industrial humidity and temperature transmitter				HMP237				PRICE															
Transmitter type	RH+T		A																				
	<i>RH+T+Td</i>		<i>B</i>																				
	<i>RH+T+a+Tw+x</i>		<i>C</i>																				
	<i>RH+T+Td+a+Tw+x+h</i>		<i>D</i>																				
	<i>RH+T+h</i>		<i>F</i>																				
Display	no display		1																				
	<i>display on transmitter cover</i>		<i>2</i>																				
Probe cable length	2 m cable, +180 °C (+356 °F)		A																				
	<i>5 m cable, +180 °C (+356 °F)</i>		<i>B</i>																				
	<i>10 m cable, +180 °C (+356 °F)</i>		<i>C</i>																				
Power supply, alarm output & connectors	24 V, no connectors		0																				
	<i>115 V, no connectors</i>		<i>1</i>																				
	<i>230 V, no connectors</i>		<i>2</i>																				
	<i>24 V, + alarm output unit (no connectors)</i>		<i>3</i>																				
	<i>24 V, shared connector for power supply and analog outputs</i>		<i>4</i>																				
	<i>24 V, as above + alarm output unit not on connector</i>		<i>5</i>																				
	<i>115 V, connector for analog outputs</i>		<i>6</i>																				
	<i>230 V, connector for analog outputs</i>		<i>7</i>																				
	<i>24 V, connector for RS232C</i>		<i>8</i>																				
Using serial interface:	<i>24 V, 2 connectors: RS232C and analog outputs+power supply</i>		<i>9</i>																				
	<i>24 V, 2 connectors shared for power supply and RS485</i>		<i>9</i>																				
Serial interface	RS 232C		A																				
	<i>RS 485/RS 422</i>		<i>B</i>																				
	<i>current loop</i>		<i>C</i>																				
Sensor protection	sintered stainless steel filter (16452)		1																				
	PPS plastic grid & stainless steel netting (16720HM)		2																				
Analog output signals (Ch1 and Ch2)	4...20 mA		A																				
	0...20 mA		B																				
	0...1 V		C																				
	0...5 V		D																				
	0...10 V		E																				
Parameters for the analog outputs (If available in the chosen transmitter type)	RH (0...100 %RH)																						
	T (range: see below)																						
	Td (-40...+100 °C) (-40...+212 °F)																						
	a (0...600 g/m3) (0...+262 gr/ft3)																						
	Tw (0...+100 °C) (+32...+212 °F)																						
	x (0...500 g/kg d.a.) (0...3500 gr/lb d.a.)																						
	h (-40...1500 kJ/kg) (-17.2...644.9 Btu/lb)																						
(Ch1 and Ch2)																							
Analog output range for temperature	-20...+80 °C (-4...+176 °F)																						
	-20...+120 °C (-4...+248 °F)																						
	-20...+180 °C (-4...+356 °F)																						
	-40...+80 °C (-40...+176 °F)																						
	-40...+120 °C (-40...+248 °F)																						
	-40...+180 °C (-40...+356 °F)																						
	0...+100 °C (+32...+212 °F)																						
Units (local display and serial interface)	metric		1																				
	non-metric		2																				
Installation kit	no		A																				
	<i>for duct mounting</i>		<i>B</i>																				
Regaining option *) and sensor type	no regaining (HUMICAP K)		3																				
	<i>regaining (HUMICAP KC)</i>		<i>2</i>																				
Manual language	No manual		A																				
	English		B																				
	German		C																				
	French		D																				
	Finnish		E																				
																TOTAL							
																QTY							
																TOTAL VALUE							

*) Humidity sensor regaining can be used to reduce the effects of some chemical contaminants. If the regaining option is chosen, the sensor must be protected either with a sintered filter or with a PPS plastic grid with steel netting; the PPS plastic grid can not be used. Please note that if mains power (115/230V) is selected regaining cannot be used. For further information about this option, please see product data sheet or contact Your Vaisala representative.

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Selections in italic are available at an extra price.

Example of order code with typical settings:

HMP237 A 1 A 0 A 1 A A 1 2 B 1 A 3 B

End customer: _____

HMP238 Humidity and Temperature Transmitter

With pressure tight high temperature probe for pipeline installations

Industrial humidity and temperature transmitter				HMP238			1												PRICE									
Transmitter type	RH+T		A																									
	<i>RH+T+Td</i>		<i>B</i>																									
	<i>RH+T+a+Tw+x</i>		<i>C</i>																									
Display	no display																											
	<i>display on transmitter cover</i>																											
Probe cable length	2 m cable, +180 °C	(+356 °F)																										
	<i>5 m cable, +180 °C</i>	<i>(+356 °F)</i>																										
	<i>10 m cable, +180 °C</i>	<i>(+356 °F)</i>																										
Power supply, alarm output & connectors	24 V, no connectors																											
	<i>115 V, no connectors</i>																											
	<i>230 V, no connectors</i>																											
	<i>24 V, + alarm output unit (no connectors)</i>																											
	<i>24 V, shared connector for power supply and analog outputs</i>																											
	<i>24 V, as above + alarm output unit not on connector</i>																											
	<i>115 V, connector for analog outputs</i>																											
Using serial interface:	<i>230 V, connector for analog outputs</i>																											
	<i>24 V, connector for RS232C</i>																											
Serial interface	RS 232C																											
	<i>RS 485/RS 422</i>																											
	<i>current loop</i>																											
Sensor protection	sintered stainless steel filter (16452)																											
Analog output signals (Ch1 and Ch2)	4...20 mA																											
	<i>0...20 mA</i>																											
	<i>0...1 V</i>																											
	<i>0...5 V</i>																											
	<i>0...10 V</i>																											
Parameters for the analog outputs (If available in the chosen transmitter type) (Ch1 and Ch2)	RH	(0...100 %RH)																										
	T	(range: see below)																										
	Td	(-40...+100 °C)	(-40...+212 °F)																									
	a	(0...600 g/m³)	(0...+262 gr/ft³)																									
	Tw	(0...+100 °C)	(+32...+212 °F)																									
	x	(0...500 g/kg d.a.)	(0...3500 gr/lb d.a.)																									
	h	(-40...+1500 kJ/kg)	(-17.2...644.9 Btu/lb)																									
Analog output range for temperature	-20...+80 °C	(-4...+176 °F)																										
	-20...+120 °C	(-4...+248 °F)																										
	-20...+180 °C	(-4...+356 °F)																										
	-40...+80 °C	(-40...+176 °F)																										
	-40...+120 °C	(-40...+248 °F)																										
Units (local display and serial interface)	metric																											
	non-metric																											
Installation kit	no installation kit																											
Regaining option *) and sensor type	no regaining (HUMICAP K)																											
	<i>regaining (HUMICAP KC)</i>																											
Manual language	No manual																											
	English																											
	German																											
	French																											
	Finnish																											

TOTAL	
QTY	
TOTAL VALUE	

*) Humidity sensor regaining can be used to reduce the effects of some chemical contaminants. If the regaining option is chosen, the sensor must be protected either with a sintered filter or with a PPS plastic grid with steel netting; the PPS plastic grid can not be used. Please note that if mains power (115/230V) is selected regaining cannot be used. For further information about this option, please see product data sheet or contact Your Vaisala representative.

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Selections in italic are available at an extra price.

Example of order code with typical settings:

HMP235 | **A** | 1 | **A** | 0 | **A** | 1 | **A** | **A** | 1 | 2 | **A** | 1 | **A** | 3 | **B**

End customer: _____