

## DCS60 DEW-POINT CALIBRATION SYSTEM

<b>Product Parent Code: PSD2</b>		
Dry Air Generation - Pressure Swing Dryer (-80°Cdp nominal)		
<b>Product Ordering Code {Feature A}+{Feature B}</b>		
Feature	Item	Description
<b>Feature {A}</b>	<b>Base Model</b>	
	PSD-2-AC	Pressure Swing Dryer

<b>Product Parent Code: DG</b>		
Dew-Point Generator		
<b>Product Ordering Code {Feature A}+{Feature B}+{Feature C}</b>		
Feature	Item	Description
<b>Feature {A}</b>	<b>Type</b>	
	DG-2	2 stage mixing manual, -75 to +20°Cdp
	DG-4SP	Solenoid operation. (Controlled from front panel keypad or through RS232 comms. 3 set points (max 10) in addition to a full dry point. Set points to be specified at time of order, Range -75 to +20°Cdp)
<b>Feature {B}</b>	<b>Power</b>	
	110	90 to 120 V AC
	240	220 to 260 V AC
<b>Feature {C}</b>	<b>Set point (DG-4 only)</b>	
	SXX	Total number of set points – note that the first 3 set points are free, each additional set point is charged at this rate (maximum of 10 set points, e.g. S10 = 10 points total, 3 included + 7 at this rate)

<b>Product Parent Code: S8K411</b>		
Dew-Point Hygrometer (Supplied with 3 off outputs (0/4-20mA or 0-1V), 2 off alarm relays (Process and Fault) & SD card slot. Unit is mains powered 85-264V AC 47-63Hz with IEC lead)		
<b>Product Ordering Code {Feature A}+{Feature B}+{Feature C}+{Feature D}+{Feature E}+{Feature F}+{Feature G}</b>		
Feature	Item	Description
<b>Feature {A}</b>	<b>Base Model</b>	
	S8K411	Cooled Mirror Hygrometer (1 bar g)
<b>Feature {B}</b>	<b>Range</b>	
	B6	-60 to +40°C dew point
<b>Feature {C}</b>	<b>Standard Calibration</b>	
	C1	Standard traceable in-house calibration
	C2	UKAS / ISO17025 DP Cal (5 calibration points)
	C3	UKAS / ISO17025 DP Cal (5Pts + additions below)
<b>Feature {D}</b>	<b>Digital Communications</b>	
	D1	USB only
	D2	USB + Ethernet
	D3	USB + RS232
	D4	USB + RS485
<b>Feature {E}</b>	<b>Internal Pressure Sensor</b>	
	E0	None fitted
	E1	Internal Pressure Sensor (0-25barA)
	E2	Internal Pressure Sensor (0-1.6barA)
<b>Feature {F}</b>	<b>Fittings</b>	
	F1	6mm Swagelok Tube
	F2	1/4" Swagelok Tube
<b>Feature {G}</b>	<b>Sample Pump</b>	
	G0	No pump fitted
	G1	Internal Pump & flow control valve, Outlet: 1/4" Tube
	G2	Internal Pump & flow control valve, Outlet: 6mm Tube

## ADDITIONAL CALIBRATION POINTS

CM-DPUKAS	5-pt UKAS/ISO17025 dew-point calibration (specify points required on order)
CM-DPAP01	Additional calibration points for UKAS/ISO17025 calibration

**DCS60 DEW-POINT CALIBRATION SYSTEM OPTIONS**

Order Codes	Product / Description
<b>Rack System</b>	
DCS-RAK	Floor standing rack with instrument shelf (for positioning of instrument/sensor under test)
<b>Compressor System</b>	
CMP-10-240	Oil free air mini compressor, 29 psig/2 barg, 10 l/min (for PSD-2)
CMP-10-240+SPC	Oil free air mini compressor, 29 psig/2 barg, 10 l/min (for PSD-2) + Soundproof cabinet for compressor
<b>Sensor Manifold</b>	
DCS-MAN	Sensor Manifold (Manufactured to suit the customer's sensors typically in anodized aluminum for RH probes or 316 SS for dew-point sensors - Price available on request when sensors to be calibrated are fully defined)

**DCS-60 Ordering Example**

<b>PSD-2+AC</b>	<b>PSD2 Pressure Swing Dryer, 100 to 240 V AC</b>
<b>DG-4SP+240+S10</b>	<b>DG4 Dew-Point Generator, 220 to 260 V AC, with 10 additional generation set points</b>
<b>S8K411+B6+C1+D1+E0+F1+G0</b>	<b>S8000 Chilled Mirror Hygrometer low pressure version (1 barg max), -60 to +40°C dew point range, standard traceable in-house calibration, USB communications, no internal pressure sensor, 6mm Swagelok Tube fittings, no pump fitted</b>

## DCS80 DEW-POINT CALIBRATION SYSTEM

<b>Product Parent Code: PSD2</b> Dry Air Generation - Pressure Swing Dryer (-80°Cdp nominal)		
<b>Product Ordering Code {Feature A}+{Feature B}</b>		
Feature	Item	Description
<b>Feature {A}</b>	<b>Base Model</b>	
	PSD-2-AC	Pressure Swing Dryer

<b>Product Parent Code: DG</b> Dew-Point Generator		
<b>Product Ordering Code {Feature A}+{Feature B}+{Feature C}</b>		
Feature	Item	Description
<b>Feature {A}</b>	<b>Type</b>	
	DG-2	2 stage mixing manual, -75 to +20°Cdp
	DG-4SP	Solenoid operation. (Controlled from front panel keypad or through RS232 comms. 3 set points (max 10) in addition to a full dry point. Set points to be specified at time of order, Range -75 to +20°Cdp)
<b>Feature {B}</b>	<b>Power</b>	
	110	90 to 120 V AC
	240	220 to 260 V AC
<b>Feature {C}</b>	<b>Set point (DG-4 only)</b>	
	SXX	Total number of set points – note that the first 3 set points are free, each additional set point is charged at this rate (maximum of 10 set points, e.g. S10 = 10 points total, 3 included + 7 at this rate)

<b>Product Parent Code: S8K401</b> Dew-Point Hygrometer (Supplied with 3 off outputs (0/4-20mA or 0-1V), 2 off alarm relays (Process and Fault) & SD card slot. Unit is mains powered 85-264V AC 47-63Hz with IEC lead)		
<b>Product Ordering Code {Feature A}+{Feature B}+{Feature C}+{Feature D}+{Feature E}+{Feature F}+{Feature G}</b>		
Feature	Item	Description
<b>Feature {A}</b>	<b>Base Model</b>	
	S8K401	Cooled Mirror Hygrometer with enhanced sensor cooling system
<b>Feature {B}</b>	<b>Range</b>	
	B4	-80 to +20°C dew point
<b>Feature {C}</b>	<b>Standard Calibration</b>	
	C1	Standard traceable in-house calibration
	C2	UKAS / ISO17025 DP Cal (5 calibration points)
	C3	UKAS / ISO17025 DP Cal (5Pts + additions below)
<b>Feature {D}</b>	<b>Digital Communications</b>	
	D1	USB only
	D2	USB + Ethernet
	D3	USB + RS232
	D4	USB + RS485
<b>Feature {E}</b>	<b>Internal Pressure Sensor</b>	
	E0	None fitted
	E1	Internal pressure sensor (0-16bara)
<b>Feature {F}</b>	<b>Gas Fittings</b>	
	F1	1/4" VCR Fitting (Inlet)
<b>Feature {G}</b>	<b>Sample Pump</b>	
	G0	No pump fitted
	G1	Internal Pump & flow control valve

## DCS80 DEW-POINT CALIBRATION SYSTEM OPTIONS

Order Codes	Product / Description
<b>Rack System</b>	
DCS-RAK	Floor standing rack with instrument shelf (for positioning of instrument/sensor under test)
<b>Compressor System</b>	
CMP-10-240	Oil free air mini compressor, 29 psig/2 barg, 10 l/min (for PSD-2)
CMP-10-240+SPC	Oil free air mini compressor, 29 psig/2 barg, 10 l/min (for PSD-2) + Soundproof cabinet for compressor
<b>Sensor Manifold</b>	
DCS-MAN	Sensor Manifold (Manufactured to suit the customer's sensors typically in anodized aluminum for RH probes or 316 SS for dew-point sensors - Price available on request when sensors to be calibrated are fully defined)

### DCS-80 Ordering Example

<b>PSD-2+AC</b>	<b>PSD2 Pressure Swing Dryer, 100 to 240 V AC</b>
<b>DG-4SP+240+S10</b>	<b>DG4 Dew-Point Generator, 220 to 260 V AC, with 10 additional generation set points</b>
<b>S8K401+B4+C2+D2+E0+F1+G0</b>	<b>S8000 RSDew-Point Hygrometer, -80 to +20°Cdp, standard traceable in-house calibration, USB &amp; Ethernet communications, no internal pressure sensor, 1/4" VCR Fitting (Inlet) gas fittings, no pump fitted</b>

## DCS100 DEW-POINT CALIBRATION SYSTEM

Additional charges for packing and carriage		
<b>Product Parent Code: PSD-4</b>		
Dry Air Generation - Pressure Swing Dryer < -100°Cdp		
<b>Product Ordering Code {Feature A}+{Feature B}</b>		
Feature	Item	Description
<b>Feature {A}</b>	<b>Base Model</b>	
	PSD-4-STD-AC	Ultra high performance dryer (Range < -100°Cdp)
	PSD-4-HPO-AC	Ultra high performance dryer with high pressure output (Range < -100°Cdp)
	PSD-4-HFV-AC	Ultra high performance dryer with 90NI/min output (Range < -100°Cdp)

Dew-Point Generator - VDS		
Three-stage flow dilution, mass flow controller, precision dew-point generator. Fully interfaced to PC		
Feature	Item	Description
<b>Base Model</b>	VDS-3	Vapour Delivery System

Product Parent Code: S8K100		
Dew-Point Hygrometer (Supplied with 2 off outputs (0/4-20mA), 1x process relay, 1 x alarm relay and SD card slot. Unit is mains powered 85-264 V AC with IEC lead)		
<b>Product Ordering Code {Feature A}+{Feature B}+{Feature C}+{Feature D}+{Feature E}+{Feature F}+{Feature G}</b>		
Feature	Item	Description
<b>Feature {A}</b>	<b>Base Model</b>	
	S8K100	Cooled Mirror Hygrometer with enhanced sensor cooling system
<b>Feature {B}</b>	<b>Range</b>	
	B1	-100 to +20 °Cfp/dp
<b>Feature {C}</b>	<b>Standard Calibration</b>	
	C1	UKAS / ISO17025 DP Cal (5 calibration points) plus -100 °Cfp verification
	C2	UKAS / ISO17025 DP Cal (5Pts + additions below)
<b>Feature {D}</b>	<b>Digital Communications</b>	
	D1	USB only
	D2	USB + Ethernet
	D3	USB + RS232
	D4	USB + RS485
<b>Feature {E}</b>	<b>Internal Pressure Sensor</b>	
	E0	Internal pressure sensor (0-1.6 bara)
<b>Feature {F}</b>	<b>Fittings</b>	
	F1	1/4" VCR Fitting (inlet)
<b>Feature {G}</b>	<b>Power Lead</b>	
	G0	UK
	G1	EU
	G2	US
	G3	China
	G4	Australia

## DCS100 DEW-POINT CALIBRATION SYSTEM OPTIONS

Order Codes	Product / Description
<b>Compressor System</b>	
CMP-25-240	Compressor and reservoir to feed PSD-4
<b>Pre-Dryer</b>	
DCS-PRE	Domnick Hunter pre-dryer (to dry PSD-4 air supply to -40°Cdp)
<b>Sensor Manifold</b>	
DCS-MAN	Sensor Manifold (Manufactured to suit the customer's sensors typically in anodized aluminum for RH probes or 316 SS for dew-point sensors - Price available on request when sensors to be calibrated are fully defined)

## DCS100 DEW-POINT CALIBRATION SYSTEM ACCESSORIES AND SPARE PARTS

Order Codes	Product / Description
PSD-4-FO	Outlet Millipore wafergard inline sealed particulate filter 0.003µm
PSD-4-FV	Vent particulate filter element 0.1µm

### Ordering Example

<b>PSD-4-STD+AC+VDS-3+S4K-TRS+232+240</b>	<b>PSD4 Ultra high performance Pressure Swing Dryer, 100 to 240 V AC, VDS3 Dew-Point Generator, S4000 TRS Dew-Point Hygrometer, RS232, 220 to 260 V AC</b>
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Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice. Please contact us for latest version. Issue No: DCS\_97162\_V6\_UK\_1121