

VDS3

Dew-Point Generator



The VDS3 is a sophisticated computer controlled dew-point generator that operates in the range of -100 to $+20^{\circ}\text{Cdp}$ (-148 to $+68^{\circ}\text{Fdp}$). Individual three stage mass flow controllers select precise proportions of wet and pre-mixed air. Humidity injection is achieved by a liquid mass flow controller and controlled evaporation system. The Vapor Delivery System (VDS) gives repeatable and flexible control of the generated dew point and can be programmed with up to 13 presets that can be activated manually or as part of an automatic calibration program.

Highlights

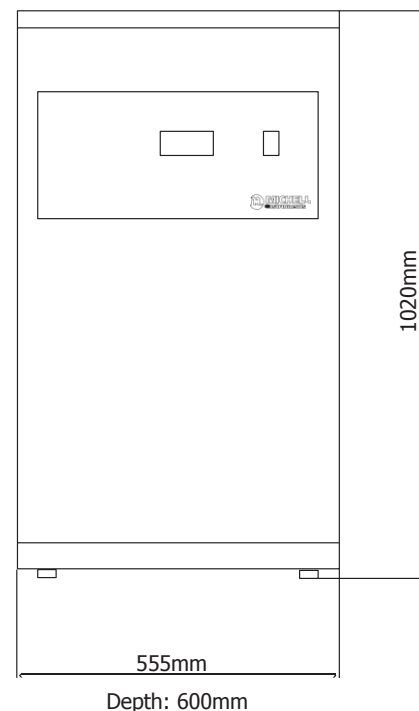
- Operation range of -100 to $+20^{\circ}\text{Cdp}$ (-148 to $+68^{\circ}\text{Fdp}$) suiting the calibrated range of almost all dew-point sensors
- Fully automated remote control
- Mass flow controlled mixing of wet and dry flows ensures complete repeatability of set points
- Generated output responds quickly to a change of set point
- System optimised for excellent output stability ($\pm 0.5^{\circ}\text{C}$ / $\pm 0.9^{\circ}\text{F}$)

Technical Specifications

Dew-point range	-100 to $+20^{\circ}\text{Cdp}$ (-148 to $+68^{\circ}\text{Fdp}$) (factory default preset values= -100 , -90 , -80 , -70 , -60 , -50 , -40 , -30 , -20 , -10 , 0 , $+10$ and $+20^{\circ}\text{C}$ ($+68^{\circ}\text{F}$))
Output Stability	$\pm 0.5^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$)
Required gas supply	30 NI/min (63.6 scfh) @ 4.8 barg (70 psig) pressure and <13.8 ppb _v (-100°C / -148°F atmospheric dew point) moisture content
Gas output	10 NI/min (21.2 scfh) @ 0.5 barg (7.3 psig)
Cable connection	USB (type B) for PC Control RS485 (9 way D plug) for Setup
Water reservoir	Material= ABS Capacity= 1 litre
Power supply	220 to 240 V AC or 100 to 120 V AC 50/60 Hz
Power consumption	500 Watt maximum
Power connector	3 pin IEC
Power supply fuse	3A (F) quick blow
Operating temperature	$+10$ to $+40^{\circ}\text{C}$ ($+50$ to 104°F)
Construction	Painted diecast aluminum enclosure with smoked glass door. Overall dimensions = $1020 \times 555 \times 600\text{mm}$ ($40 \times 22 \times 24''$) h x w x d
Weight	65kg (143lbs) maximum

Dimensions

Front View



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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.

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