



The RD299 HPT is a combined humidity, pressure and temperature sensor for use with the 298 ShockLog range of recorders. It enables any version of the 298 to monitor an extended range of environmental factors and is fully supported by the ShockLog software.

The RD299 HPT has been designed to function reliably in harshest of environments. The electronic components are assembled using surface mount technology and the latest automatic assembly equipment. The complete electronic and transducer package is enclosed in a stainless steel case and bonded to the military quality connector, which provides electrical and mechanical attachment to the 298 ShockLog recorder.

This construction technique, in combination with the absence of cables for power or signal results in a very high immunity to electrical interference and very low levels of RF emission. The RD299 HPT may safely be used in close proximity to sensitive instruments or in difficult electrical environments. The RD299 HPT has been designed to meet IP30 and is capable of operating at temperatures between -40 and +85°C.

An extension cable is available as an optional extra for applications where the RD299 must be mounted remotely from the 298 ShockLog recorder and through the use of the bulkhead adaptor it is possible to mount

the HPT sensor internally while leaving the 298 Shock recorder on the external surface.

RD299 HPT

Product Code 1 Bar 29900
2 Bar 29900B2

Series ShockLog

Benefits

- Direct connection to 298 ShockLog
- Fully supported by ShockLog software
- Extended temperature range
- Robust stainless steel housing
- Obtains power from 298 ShockLog
- No installation – plug and play operation
- Fast temperature response
- Negligible effect on 298 ShockLog battery life
- Built in calibration memory independent of 298 ShockLog calibration
- Available with 1 Bar (29900) or 2 Bar (29900B2) Pressure Sensors

Instrument

*Data transition in these bands is either linear or exponential; there are no step functions.

Dimensions:	60 x 32 mm diameter
Weight:	90 grams
Power Supply:	Obtained from ShockLog
Case Materials:	Stainless steel and plastic
Operating Temp Range:	-40 to +85°C
Drop test survival:	1mm
EMC:	EN50081-1, EN50082-1

	29900 (1 Bar)		29900B2 (2Bar)		
	Min	Max	Min	Max	Units
Humidity					
Measuring range	0	100	0	100	%RH
Accuracy (@25 °C, 25 – 75 %RH)	-3	+3	-3	+3	%RH
Accuracy (@25 °C, 0 - 25 & 75 - 100 %RH)*	-6	+6	-6	+6	%RH
Resolution	0.5		0.5		%RH
Pressure 1 Bar Unit	Min	Max	Min	Max	Units
Measuring range	0	1.1	0	2.1	Bar
Accuracy (@ 0.2 – 1.1 Bar, 25 °C)	-10	+10	NA	NA	mBar
Accuracy (@ 0.0 – 0.2 Bar, 25 °C)*	-30	+30	NA	NA	mBar
Accuracy (@ 0.4 – 2.1 Bar, 25 °C)	NA	NA	-20	+20	mBar
Accuracy (@ 0.0 – 0.4 Bar, 25 °C)*	NA	NA	-60	+60	mBar
Resolution	2		4		mBar
Temperature	Min	Max	Min	Max	Units
Measuring range	-40	+85	-40	+85	°C
Accuracy (-20 to +70°C)	-2	+2	-2	+2	°C
Accuracy (-40 to -20 & +70 to +85°C)*	-4	+4	-4	+4	°C
Resolution	0.5		0.5		°C

Accessories

Code	
29800BHA	RD401 bulkhead adaptor
29800CBxx	RD401 female to female cable (xx = length)
29900CAL	RD299 HPT calibration