



WATER & SOIL

Temperature Probes SKTS 300



For soil or water temperatures



Includes a precision PT100 temperature sensor



Fully waterproofed for burying in the soil or submersing in water



A range of outputs to suit most dataloggers



Skye Instruments offer a variety of temperature probes for many different applications, including indoor and outdoor air temperature, soil and ground temperature, water temperature, small area or surface temperatures etc.

This datasheet describes the range of temperature probes which utilise a PT100 or PRT sensing element. Skye use only fully sealed, platinum wire wound PT100 elements for long term accuracy and reliability.

The SKTS 300 probe houses the PT100 sensor in a robust and fully submersible tip. This is ideal for inserting into the soil for measuring ground temperatures, or for long term monitoring of water temperatures.

A range of outputs are available to suit most dataloggers, meters and controllers. The basic probe has a resistance output direct from the PT100 sensor, alternatively linearising electronics can be included (within a small non

submersible housing in line with the sensor cable). Several scaling and amplifier options are available, please see specifications overleaf for details.

All temperature probes can be supplied wire ended for user's own dataloggers or systems, or with waterproof connectors for use with Skye's dataloggers and meters.

PROBE TIP SPECIFICATIONS

Sensing element	Operating Range	Tip Dimensions and Construction	Cable Length
Pt100 1/3 rd DIN BS1904 / DIN 43760 +/- 0.05°C Maximum error at 0°C	-55° to +80°C 0-100 %RH	7mm diameter x 60mm Robust, fully sealed IP68 housing	3m screened cable (Up to 50m on request)

LINEARISING ELECTRONICS

Housing	Operating Range	Power Supply
Grey ABS IP 65 82 x 80 x 55mm Fitted in line with probe tip 1m cable for connection	-20°C to +70°C 0-100 %RH	5-15 VDC (7-15V for 0-5V amplified versions) 1.8 - 5 mA Reverse protected

CONNECTION DETAILS

SKTS 300 Wire Colour	SKTS 300 Function	SKTS 300/x Wire Colour	SKTS 300/x Function
Red Yellow	Joined at PT100 terminals	Red Blue Grey	Power positive Power Common Output common and cable screen (also connected to power common on PCB)
Green Blue	Joined at PT100 terminals	Yellow	Temperature output
Grey	Cable screen	Green	Not used

ORDERING INFORMATION

Temperature Probes

SKTS 300	Temperature probe with PT100 output
SKTS 300/1	Temperature probe 0-1V = -20 to +70°C
SKTS 300/1/A	Temperature probe 0-5V = -20 to +70°C
SKTS 300/3	Temperature probe 0-1V = -30 to +70°C
SKTS 300/4	Temperature probe 0-1V = 0 to +50°C

Meters & Loggers

SDL 5000 series	DataHog dataloggers
SDL 2900 series	MiniMet weather station

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