

DTP-02 Dielectric Temperature Patch

Basic characteristic

▲ DTP-02 is a temperature sensor based on FBG technology featuring a composite material with a high flexibility body adaptable to most surface curvatures. The sensor construction allows the installation of the sensor to the measured surface due to the small shape, even on challenging shapes.



Benefits

- Surface-mountable.
- Ruggedized and compact construction.
- ▲ Fully dielectric, with no metallic parts.

Applications

- Temperature measurement.
- ▲ Temperature compensation of strain sensors (typically with DSP-01).
- Curved objects.

Performance properties	
Operational temperature range	-30°C up to +70°C
Peak temperature endurance	up to +80°C
Temperature accuracy (guaranteed) ¹⁾	1°C
Temperature accuracy (typical) ¹⁾	<1°C
Temperature precision (guaranteed) ²⁾	±0,4°C
Temperature precision (typical) ²⁾	±0,3°C
Temperature resolution	0,1°C
Temperature sensitivity	10pm/°C
Ingress Protection rating	IP66

¹⁾ Accuracy is established for each sensor under laboratory conditions and it includes hysteresis, non-linearity, and repeatability of the sensor.

²⁾ Precision is established on a batch basis and it includes hysteresis, non-linearity, repeatability, and reproducibility of the sensor.



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Physical properties	
Housing material	GFRP (composite)
Anchoring distance	n/a
Dimensions (without cable)1)	100mm x 15 x 5mm (L x W x H)
Weight (without cable)	Around 30g
Cable type	900µm PTFE/PEEK / 3mm Dyneema reinforced tubing
Cable length ²⁾	1mtr
Cable Bend Radius (dynamic)	40mm
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Cable Bend Radius (static) 30mm Connector type³⁾ FC/APC (single-ended)

Packaging

Cardboard box with dimensions: 370x290x45mm¹⁾

Quality statement

DTP-02 sensor is compliant with IEC 61757:2018 All sensors are 100% tested and calibrated at SYLEX The sensor is manufactured according to ISO 9001:2015 and ISO 14001:2015

Optional accessories

- ▲ WCP-01 Watertight connector protection used for FC/APC connector protection during the installation against dust and water – IP67 rated.
- **LCP-03 Longer cable pigtails** used to extend the cable lengths from 1mtr up to 20mtr.

For more information contact our sales team at sales@sylex.sk

* Specifications are subject to change without notice

Glue Mounting method

¹⁾ For further dimensions, see the product drawing

²⁾ Cable length is extendable on request

³⁾ Other connector types available on request