

TPA-01 Temperature array sensor

Basic characteristic

- ▲ TPA-01 is multi-segment temperature compensating chain.
- ▲ TPA-01 can be mounting to the surface parallel to fiber optic strain gauges.
- ▲ TPA-01 is accurate sensor with high temperature measuring range.
- ▲ TPA-01 can be connected in series configuration with other sensors by connector or splice connection.



Benefits

- ▲ **MOUNTING:** Direct surface-mountable.
- ▲ **COST:** Effectively replacing numbers of individual sensors with multiple segments in one-cable-array design.
- ▲ **INSTALLATION:** Quick and easy as it is only one-cable-array
- ▲ **DESIGN:** Fully customizable in number of individual temperature sensors

Applications

- ▲ Temperature measurement applicable in different fields.
- ▲ Temperature compensation of strain sensors.

Performance properties

Temperature range	-20°C up to +80°C
Temperature accuracy (guaranteed) ¹⁾	1°C
Temperature accuracy (typical) ¹⁾	<1°C
Temperature precision (guaranteed) ²⁾	±0,3°C
Temperature precision (typical) ²⁾	±0,2°C
Ingress Protection rating	IP 67

¹⁾ Accuracy is established for each individual 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	Glass
Number of measuring sections ¹⁾	Up to 20
Dimensions (without cable) ²⁾	Ø 2mm x 30mm
Weight (without cable) ³⁾	50g
Cable type	3mm armored
Cable length ⁴⁾	1mtr
Cable Bend Radius (dynamic)	30mm
Cable Bend Radius (static)	15mm
Connector type ⁵⁾	FC/APC
Mounting method	Surface mounting

¹⁾ Number of measuring sections depends on customer's requirement

²⁾ For further dimensions details see the product drawing

³⁾ Valid for 6mtr long sensor with 6 measuring sections

⁴⁾ Cable length is extendable on request

⁵⁾ Other connector types available on request

Packaging

Cardboard box with dimensions: 370x290x45mm

Quality statement

TPA-01 sensor is compliant with IEC 61757:2018

All sensors are 100% tested and calibrated at SYLEX

Sensor is manufactured according to ISO 9001:2008 and ISO 14001:2004

Optional accessories

- ▲ **LCP-01 Longer cable pigtails** – used to extend the cable lengths from 1mtr up to 20mtr.

* Specifications are subject to change without notice