

## TFX 410 Core Thermometer with fixed Pt 1000 probe



- High precision
- Approximately 5 years battery life time
- Waterproof (IP 67)

### Technical Data

Measurement range	-50 °C ... +300 °C (-58 °F ... +572 °F)
Battery	3.0 V lithium, user replaceable
Certificate	3-point factory calibration

Type	Description	Part No.
TFX 410	Thermometer with TPX 410 probe, pointed, 60 cm silicone cable	1340-5410
AG 190	Drill for frozen food	1341-3834

## TFX 410-1 Core Thermometer without Probe for various Pt 1000 probes



Various probes available  
(see page 49).

- High precision
- Approximately 5 years battery life time

### Technical Data

Measurement range	-50 °C ... +300 °C (-58 °F ... +572 °F)
Sensor connection	Lemos size 0
Battery	3.0 V Lithium, replaceable
Certificate	3-point factory calibration

Type	Description	Part No.
TFX 410-1	Thermometer without probe	1340-5415
AG 190	Drill for frozen food	1341-3834

## TFX 420 Core Thermometer without Probe with MIN/MAX and hold options



Various probes available  
(see page 49).

- High precision
- Approximately 5 years battery life time

### Technical Data

Measurement range	-50 °C ... +400 °C (-58 °F ... +752 °F)
Sensor connection	Lemos size 0
Battery	3.0 V Lithium, replaceable
Extra functions	Hold, MIN / MAX
Certificate	3-point factory calibration

Type	Description	Part No.
TFX 420	Thermometer without probe	1340-5425
AG 190	Drill for frozen food	1341-3834

## TFE 510-1 Core Thermometer without Probe with fast response time



TFE 510 TPE 400

- With replaceable probe
- Approximately 5 years battery life time

### Technical Data

Measurement range	-50 °C ... +300 °C (-58 °F ... +572 °F)
Accuracy	±0.5 °C (0.9 °F)
Resolution	0.1 °C (0.2 °F)
Measurement probe	Thermocouple, type T
Operating temperature	-25 °C ... +50 °C (-13 °F ... 122 °F)
Storage temperature	-30 °C ... +70 °C (-22 °F ... 158 °F)
Thermal constant ( $t_{99}$ )	3s
Battery	Lithium 3.0 V
Battery lifetime	Approximately 5 years
Dimensions (L x W x H)	109 x 54 x 22 mm
Housing material	ABS
Weight	Approximately 90 g
Protection class	IP 67
Sampling rate	0.5 s to 15 s
Certificate	3-point factory calibration
Automatic shut off	After 2 hours, optional

Type	Description	Part No.
TFE 510-1	Thermometer without probe	1340-5510
TFE 510 + TPE 400	Thermometer with probe, with blue silicone cable, 0.6 m	1340-5516
TPE 400	Probe with blue silicone cable, 0.6 m, for TFE 510	1341-5516
AG 140	Protective cover for handheld devices, red	1340-5005
AG 190	Drill for frozen food	1341-3834

## Accessories for TFX- and TFE-Thermometers



**AG 130** Transport case



**AG 140** Protective cover for handheld devices, red



**AG 150** Plastic bracket suitable for 10 mm and 12 mm lamus tripods



**AX 100** Extension cable for TFX devices, 1m, Lemos size 0



**AG 170** Battery exchange set



**AG 160** Stainless steel bracket



**AG 161** Stainless steel bracket for thermometers

The stainless steel brackets can only be used with TFN 520 or TFN 520-SMP

Type	Description	Part No.
AG 130	Transport case	1341-3854
AG 140	Protective cover for handheld devices, red	1340-5005
AG 150	Plastic bracket	1340-5000
AG 160	Stainless steel bracket	1340-0595
AG 161	Stainless steel bracket for TFX devices with protective cover AG 140	1340-0596
AG 170	Battery-change set (incl. 3V lithium CR 2477 battery, needle, screws, tamping, O-ring, manual)	1100-0106
AX 100	Extension cable 1m for TFX devices (Lemos size 0)	1340-5015

## Probes for TFX 410-1 / TFX 420

*Pt 1000 Probe (with Lemosa size 0)*

The probes of the TFX 410-1 and TFX 420 core thermometers are all changeable – and yet the devices have protection class IP 67, i.e. protection against immersion up to 1 m. Even little mishaps like plummeting the device into a bucket of water won't have consequences. The various probes and cables allow for a use in many different applications, e.g. heating of food (PTFE) or in rough and humid environments (silicone).

**TPX 100** blunt probe

(Needle length = 120 mm, Ø 3 mm, blunt, stainless steel needle, up to +400 °C)

**TPX 200** pointed probe

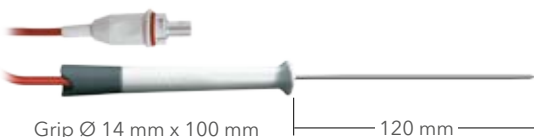
(Needle length = 120 mm, Ø 3 mm, pointed, stainless steel needle, up to +400 °C)

**TPX 300** glass-coated probe

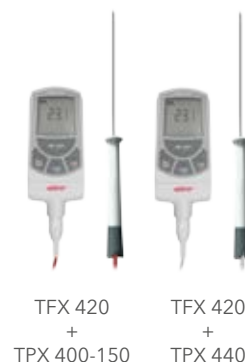
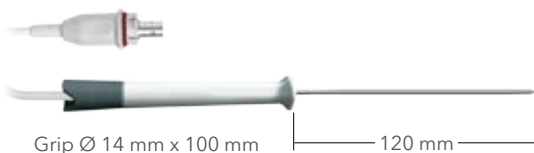
(Needle length = 190 mm, Ø 8 mm, glass-coated, stainless steel needle, up to +400 °C)

**TPX 400** pointed probe

(Needle length = 120 mm, Ø 3 mm, pointed, with 60 cm silicone cable, stainless steel needle, up to +400 °C)

**TPX 440** pointed probe

(Needle length = 120 mm, Ø 3 mm, with 150 cm PTFE cable, stainless steel needle, up to +400 °C)

**Technical Data**

Accuracy	Exceeds DIN IEC 584, class 1
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TF 410 – still working, thanks to IP 67

Type	Description	Part No.
TPX 100	Blunt probe, needle length = 120 mm, Ø 3 mm, without cable	1341-5417
TPX 200	Pointed probe, needle length = 120 mm, Ø 3 mm, without cable	1341-5418
TPX 200-20	Pointed probe, needle length = 200 mm, Ø 3 mm, without cable	1341-4182
TPX 200-30	Pointed probe, needle length = 300 mm, Ø 3 mm, without cable	1341-4183
TPX 200-40	Pointed probe, needle length = 400 mm, Ø 3 mm, without cable	1341-4184
TPX 300	Glass-coated probe, needle length = 120 mm, Ø 8 mm, without cable	1341-5419
TPX 400	Pointed probe with 60 cm silicone cable (red) and grip, needle length = 120 mm, Ø 3 mm	1341-5416
TPX 400-40	Pointed probe with 40 cm silicone cable (red) and grip, needle length = 120 mm, Ø 3 mm	1341-4164
TPX 400-150	Pointed probe with 150 cm silicone cable (red) and grip, L = 120 mm, Ø 3 mm	1341-4168
TPX 440	Pointed probe with 150 cm PTFE cable (white) and grip, L = 120 mm, Ø 3 mm	1341-4169