

eTrace

Construction Internet of Things

STRATOSGROUP

Monitoring & Control of Concrete in Real Time

Industrial Internet of Things (IIoT)
Reduce costs and times, increases
your productivity and security

eTrace Precast ETC 2CH

Benefits

Timely Detensioning

Cut strands when the strength has reached its target value and avoid risks and damages

Costs Reduction

Optimize energy consumption, workforce, and mix designs

Cure Control

Monitor the curing process in real time

Traceability and Quality

Full traceability of your quality controlled processes

Description

eTrace Precast offers 2 input channels for Type k thermocouple, relative humidity sensor and environment temperature sensor in an automated and real-time solution for the estimation of concrete strength by means of the maturity method. The eTrace devices measure and transmit information to the eTrace platform, which through analytics generates accurate and reliable information in real time. It is possible to configure different types of alerts to be notified automatically to all people involved.



Precast
CONTROL

SENSORS

PLATFORM

PRECAST COMPANY



Strength



Core Temperature



Surface Temperature



Environment Temperature



Relative Humidity

ETRACE DEVICE



IOT HUB

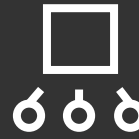


Analytics



Artificial Intelligence

Personalized integration



Third-Party integration
(SAP, ERP, etc.)



Control and Analytics
Dashboard



Alerts
(Email / SMS)

Technical Specifications

General

Power: 110 to 240 VAC @ 50 / 60Hz, POE not supported

Consumption: 1W @ 110/240 VAC

Protections: overvoltage, internal fuse

Power button: Capacitive button type

0.96 inch OLED screen with backlight

Status LED: RGB LED diffuser

Charge

Wireless charging system

Ports / Connectivity

Wireless: LoRa

Battery support

Battery type: Lithium Ion

Nominal capacity: 3000 mAh (@ 3.7 V)

Weather Temperature / Relative Humidity (RH%)

Precision Relative Humidity Sensor: $\pm 3\%$ RH (max), 0–80% RH

High Accuracy Temperature Sensor: $\pm 0.4\text{ }^{\circ}\text{C}$ / $\pm 33\text{ }^{\circ}\text{F}$ (max), -10 to $85\text{ }^{\circ}\text{C}$ / 14 to $185\text{ }^{\circ}\text{F}$

0 to 100% RH operating range

Factory-calibrated

Temperature

2 Channel: K Type Thermocouple

Environmental and mechanical characteristics

IP65, ASA plastic (ABS + UV Protection)

Dimensions: 120 mm x 109 mm x 63 mm / 4.72" x 4.29" x 2.48"

Operating humidity: 5 ~ 95% RH

Operating temperature: -10 ~ $70\text{ }^{\circ}\text{C}$ (14 ~ $158\text{ }^{\circ}\text{F}$)

Weight: 222 g / 0.49 lbs

