PRODUCT SHEET

TrackView Pro SMART Probes for Environmental Monitoring

A wide range of measurements offering complete flexibility, security and integrity, ensuring ultimate piece of mind.

When selecting a monitoring system, the first consideration should be deciding which situations need to be monitored, to enable the appropriate sensors to be selected. The TrackView Pro system provides access to a wide variety of sensors including, but not limited to, temperature, relative humidity (RH), carbon dioxide (CO2), differential pressure (DP), door switches, analog sensors with 4-20mA and 0-10V inputs, digital input and output sensors and more, ideally suited for the specific needs of life science industries, including bio-pharmaceutical, medical device and healthcare.

All TrackView Pro SMART sensors connect to TrackView Pro transmitters via one of two SMART connectors and are designed to be securely connected to the transmitter at all times, with a mechanical locking mechanism protecting from accidental disconnection. All factory and user calibration is stored within the sensors' EEPROM memory and the analog to digital conversion happens within the Ellab SMART connector, enabling the sensors to be 'hot swapped' between different transmitters. This ability to exchange sensors also provides the opportunity to quickly and efficiently replace sensors with expired calibration with newly calibrated units. TrackView Pro SMART sensors can be calibrated or verified directly from the EMSuite Software.

Each TrackView Pro SMART sensor has a unique ID number and QR code. Scanning the QR code enables access to the myEllab platform to retrieve all critical information relating to each TrackView Pro SMART sensor.

Third party sensors connected via SMART connectors can be recognised by the EMSuite software, but may need to be adjusted with the appropriate manufacturer's software if required.

Please consult your Ellab specialist for more information.

Area		Parameters			
Laboratory Equipment	Refrigerators	✓	✓	-	✓
	Freezers	✓	-	-	✓
	Incubators	✓	✓	✓	✓
	Stability Chambers	✓	✓	-	✓
Clean Rooms (Pressure Cascades)		✓	✓	✓	✓
Animal Rooms		✓	✓	-	-
Packaging		✓	✓	-	-
Cold/Frozen Room Storage		✓	-	-	✓
Warehouse Storage		✓	✓	-	✓

Key Features & Benefits

Secure connection to prevent accidental uncoupling

Interchangeable Sensors with complete traceability

Links to myEllab app to access SMART probe calibration/ information

Calibration data stored in SMART Sensors' memory

Interested in this product?
Contact Sales Today

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Technical Specs

Temperature Sensors

Technical Specification	Ellab Smart Sensor with integrated PT1000 Temperature Probe 33068700	Ellab Smart Sensor PT1000 External Temperature Probe 3 metre cable (33068703) 5 metre cable (33068705)
Operating Temperature, sensor interface	-20°C to +60°C	-20°C to +60°C
Measuring Range Temperature	-20°C to +60°C	-200°C to +250°C
Accuracy, temperature	-20°C to +60°C (±0.1°C)	-200°C to -90°C (±5.0°C) -90°C to -40°C (±0.6°C) -40°C to +80°C (±0.1°C) +80°C to +125°C (±0.4°C) +125°C to +250°C (±1.5°C)
Calibration data	EEPROM in sensor	EEPROM in sensor
Sensor diameter	2.5mm	4mm
Sensor length	N/A	71mm
Cable diameter	N/A	3.3mm
Cable length	0m (40cm wire roll out for dry-block calibration)	3 and 5 meters
Sensor Technology	PT1000 (2-Wire principle)	PT1000 (4-Wire principle)
Traceability	Each Sensor is marked with a unique serial number	
Material	Transmitter interface: Polyamide Sensor housing: POM	Transmitter interface: Polyamide Cable: PFA insulated
		

Relative Humidity (RH) Sensors

Technical Specification	Ellab Smart Sensor with integrated T & RH probe 33068400	Rotronic HC2-S RH/T Probe 33281500
Operating Temperature, sensor interface	0 to 40°C	-50°C to +100°C
RH Accuracy Non-condensing 0-100%	±3% (0 to 40°C)	±0.8% @ 5%, 50% and 95%
RH Accuracy Non-condensing over calibrated ranges	±2% 10 to 90% @ 22.5°C	Refer to Rotronic datasheet
RH Resolution	0.01%RH	
Temp.Measuring Element	PT1000	
Temp.Measuring Range	0 to 60°C	-50°C to +100°C
Temp. Calibrated range	5 to 40°C	Refer to Rotronic datasheet
Temp. Accuracy	0.3°C	
Temp. Resolution	0.1°C	
Calibration data	EEPROM in sensor	Inside manufacturer's sensor
Traceability	Each Sensor is marked with a unique serial number	
Cable length	N/A	Direct mount with SMART USB connector (33067474) with optional 2m (33285702) or 5m (33285805) cable
Material	Transmitter interface: Polyamide Sensor housing: POM	Transmitter interface: Polyamide Sensor housing: According to Rotronic datasheet
		

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Analog Input 0 - 10V Sensor

Technical Specification	Analog Input 0-10V 33062410
Operating Temperature, sensor interface	-20 to +60 °C
Input Range	0-10V
Measure accuracy, Calibrated	±10mV
Input impedance	~1MΩ
Output Voltage	24Vdc ±5% (Only with POE connected)
Output Power	Max 1W
Calibration data	EEPROM in sensor
Connector, maximum wire size	1mm² / AWG16
Material	Transmitter interface: Polyamide Sensor terminal: Polyamide

Analog Input 4 - 20mA Sensor

Technical Specification	Analog Input 4-20mA 33062420
Operating Temperature, sensor interface	-20 to +60 °C
Input Range	4-20mA
Measure accuracy, Calibrated	±20µA
Input impedance	~76Ω
Output Voltage	24Vdc ±5% (Only with POE connected)
Output Power	Max 1W
Calibration data	EEPROM in sensor
Connector, maximum wire size	1mm² / AWG16
Material	Transmitter interface: Polyamide Sensor terminal: Polyamide

CO2 Sensor

Technical Specification	Vaisala CO2 sensor (Vaisala GMP251)
Operating Temperature, sensor interface	-20 to +60 °C
Measuring Range	0-5%, 0-10%, 0-20%
Accuracy	5% CO2: ±0.1% CO2 0 to 8% CO2: ±0.1% CO2 8 to 20% CO2: ±0.4% CO2 See OEM datasheet: https://docs.vaisala.com/v/u/B211487EN-K/en-US
Long-Term Stability	0 to 8% CO2: ±0.3% CO2/year 8 to12% CO2: ±0.5% CO2/year 12 to 20% CO2: ±1.0% CO2/year See OEM datasheet: https://docs.vaisala.com/v/u/B211487EN-K/en-US
Calibration data	EEPROM in sensor
Cable length	1.5m, 3m. 5m for 0-5% and 0-10% options only
Transmitter dependency	PoE power source or PoE injector
Material	Transmitter interface: Polyamide Sensor housing: According to OEM datasheet

Differential Pressure Sensors

Technical Specification	SMART Sensor with Differential Pressure ±50Pa 33063750	SMART Sensor with Differential Pressure ±1250Pa 33063712
Operating Temperature, sensor interface	-20 to +60°C	-20 to +60°C
Measuring range	±100 Pa	±1250 Pa
Calibrated range @22.5°C	0 to ±50 Pa	0 to ±1250 Pa
Accuracy	±1.5 Pa (0°C to +30°C)	±6.75 Pa (0°C to +50°C)
Resolution	±0.1 Pa	±1 Pa
Transmitter demands	Data Collection Rate: ≥1 minute - RF acceptable. < 1 minute - PoE power and data transfer required.	
Calibration data	EEPROM in sensor	
Pressure connector	LEMO type: PKG.A0.1GZ.ZG	
Material	Transmitter interface: Polyamide Sensor housing: POM	

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Digital Input Sensor

Technical Specification	Digital Input 33063400
Operating Temperature, sensor interface	-20 to +60 °C
Drive	Drive from customer relay
Current inflow	<1mA (internal pull-up resistor)
Connector, maximum wire size	1mm² / AWG16
Communication interface	Ellab SMART USB
Material	Transmitter interface: Polyamide Sensor terminal: Polyamide

Digital Output Sensor

Technical Specification	Digital Output 33063600
Operating Temperature, sensor interface	-20 to +60 °C
Drive	Galvanic isolated bipolar Solid State Relay
Voltage Output	Max 32V
Power Output	Max 24W
Contact impedance	Typ. 0.1Ω
Connector, maximum wire size	1mm² / AWG16
Material	Transmitter interface: Polyamide Sensor terminal: Polyamide

Door Switch Sensor

Technical Specification	Digital Door contact 33063303
Operating Temperature, sensor interface	-20 to +60 °C
Length of Switch Sensor Cable	3 meters
Switch type	REED relay NO
Dimension, wired part	30 x 20 x 7mm
Dimension, magnet part	30 x 20 x 7mm
Communication interface	Ellab SMART USB
Material	Transmitter interface: Polyamide Sensor housing: Polypropylene

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