

# S551

## Portable Display and Data Logger



**AUTO DETECT**  
SDI or Modbus-based SUTO sensors



**VERSATILE CONNECTION**  
Up to 24 sensors inputs



**LTE / 4G MODEM**  
Access from world wide



**TOUCH SCREEN**  
5" large color LCD



**TIGHT PROTECTION**  
IP65



**BACK-UP POWER**  
Battery as back-up power



## Benefits

- ✓ Easy to use and cost-effective data logging solution at the point of use.
- ✓ S4A software for data analysis and remote connection via 4G / LTE Modem
- ✓ Connectable sensors for all required measurement tasks
- ✓ Up to 24 inputs through extension boxes and Modbus/RTU
- ✓ Third-party sensors can be easily connected

## On site Logging

- Ultra portable and robust design to perform measurement tasks and audits on site
- High resolution 5" color touch screen interface, making the operation as simple as possible.
- Back up battery ensures continuous measurement and prevents data loss during power glitches and cuts.

## Plug & Play

- With a few settings, the data logger is ready for operations with virtually unlimited memory size.
- No time consuming configuration and programming is required. Just connect the sensor and start the recording.

## Optional Remote Connection

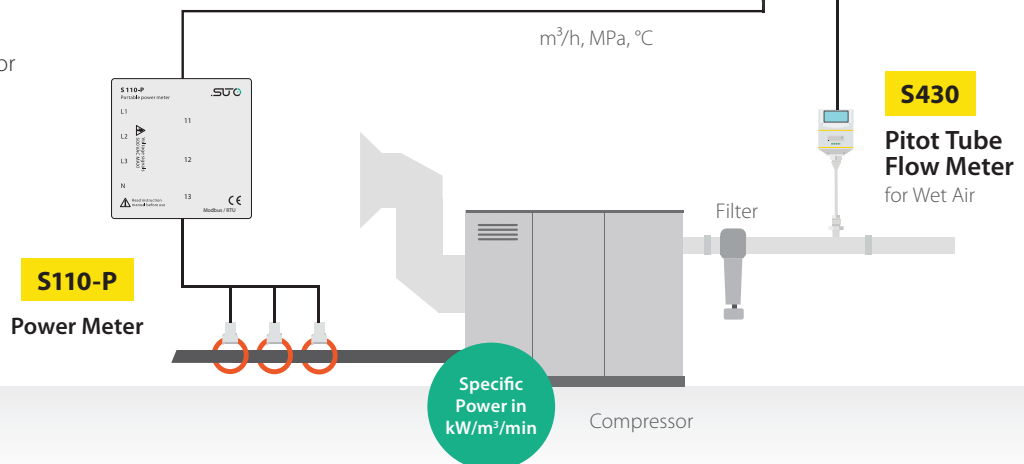
- Integrated USB port for 4G dongle connection outside the casing.
- Can be easily connected to the S4A Software and monitored remotely, no longer dependent on a Wi-Fi connection.



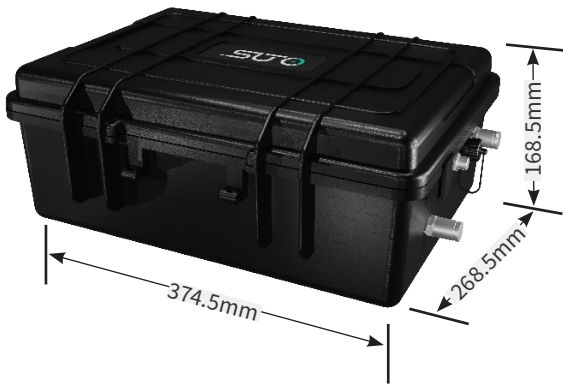
Wireless Connection

## Compressor Efficiency Test

Knowing your Compressor Efficiency is the first step for your energy saving requirements



## Applications

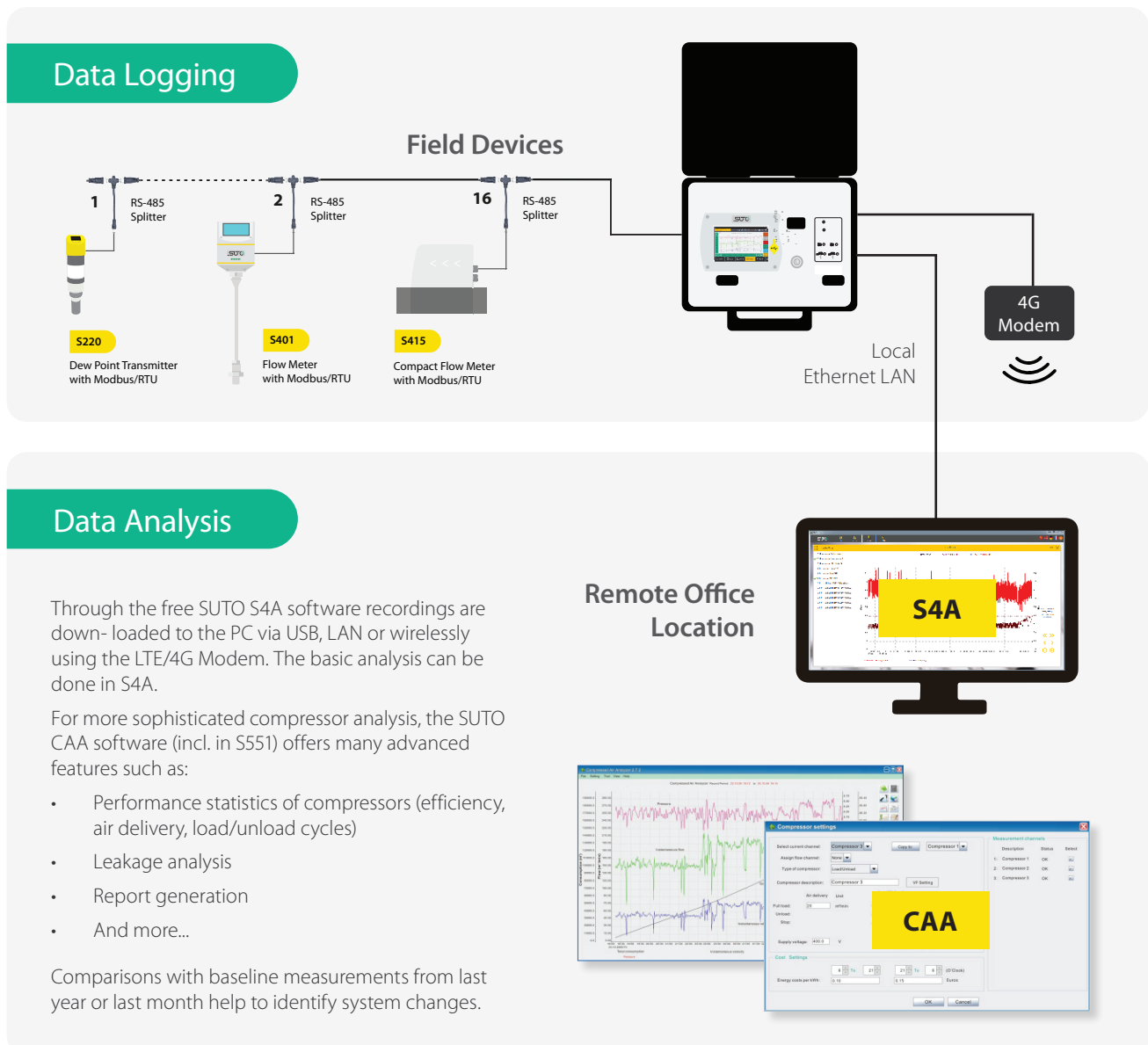


The S551 Portable Display and Data Logger is the perfect tool for compressed air service engineers as well as compressed air experts.

Due to its compact design and the integrated battery, on-site measurements are carried out most efficient user friendly. From simple dew point spot check up to identifying insufficient compressor systems, the S551 is the tool to make these measurements.

## Remote Data Analysis

The S551 is capable of sending measurement data and status information to a remote server through the Internet. This allows users to monitor the system remotely. The illustration below shows the principle setup.



## Versatile Connections and Sensor Inputs

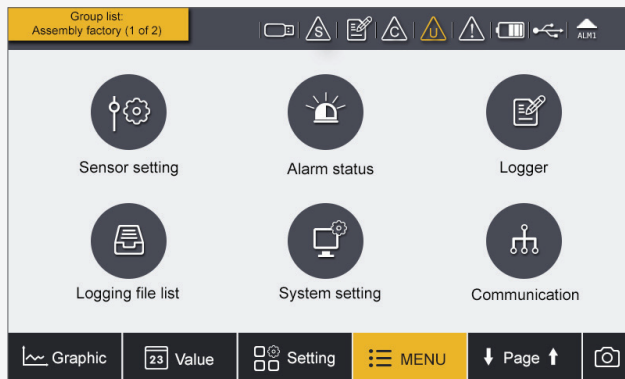
- Connectable sensors for all required measurement tasks (air flow, air consumption, power consumption, pressure, temperature and many more)
- Up to 24 inputs through extension boxes and Modbus/RTU
- Third-party sensors can be easily connected



Industrial quick connectors allow a plug & play setup and ensure a reliable sensor connection.



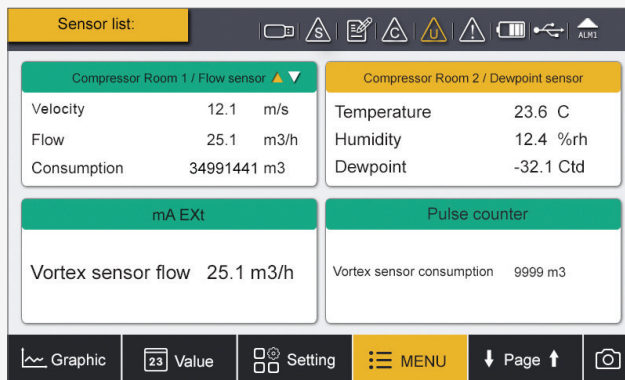
Industrial Ethernet Port for LAN connections



### User Friendly Interface

The S551 comes with a high resolution 5" color touch screen interface making the operation as simple as possible.

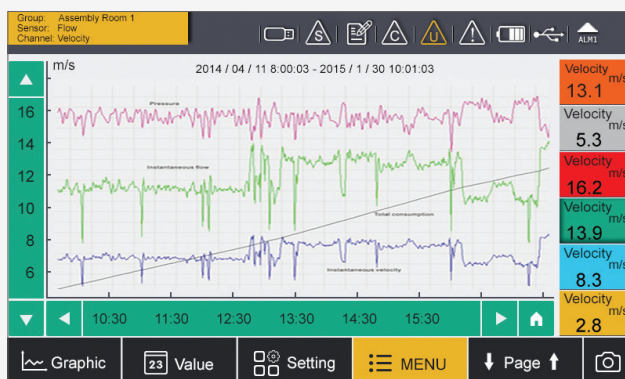
SUTO intelligent sensors are detected automatically on power-up. With a few settings the data logger is ready for operations with virtually unlimited memory size.



### Sensor Data Overview

Up to 4 sensors can be viewed on one page and through page scrolling further sensors can be displayed.

This makes it easy to monitor different sensors at the same time.



### Graphic Charts for Quick Analysis

Select which channels you want to view or analyze and the built in graphic analyzer will help you identify problems immediately.

For detailed analysis we recommend using SUTO software S4A, CAA or S4M.

# Technical Data

## Signal / Interface & Supply

### Data logger

Storage	4 GB, up to 100 million values
Sampling rate	The minimum time interval is 1 second

### Digital input

Interface	2 x SDI connectors, 2 x Modbus/RTU-connectors
Update rate	Value updated every 1 sec
No. of connectable Sensors	2 x SDI sensors 16 x Modbus/RTU sensor

### Analog input

Signal	Analog (0 ... 20 mA, 4 ... 20 mA, 0 ... 1 V, 0 ... 10 V), Pulse
Burden	Max. 250 Ohm
Update rate	Value updated every 1 sec

### Fieldbus output

Protocol	Modbus/RTU, Modbus/TCP
Update rate	Value updated every 1 sec

### Other outputs

Communication Interface	4G/LTE (optional)
Purpose	View the online measurement values, read out the logging files remotely through S4A software and USB 4G dongle

### Supply

Main power supply	100 ... 240 VAC, 50/60 Hz, 1.4 A
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### Data interface

Connection	USB micro, LAN (Ethernet)
Purpose	Read logger files & screenshots, show live data
Integrated web server	Remote monitoring (LAN)

## General data

### Configuration

PC Software	S4C-Display (via USB or LAN)
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### Display

Integrated touch screen	5" high resolution graphic display, 800 x 480 pixels with touch interface
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### Material

Housing	PC + ABS
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### Miscellaneous

Electrical connection	2x M12 (5 pole) for SDI; 2x Optional M12 (5 pole) for analog and pulse; 2x M12 (5 pole) for Modbus/RTU; 1x RJ45 Ethernet
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Protection class	IP65 (only if the suitcase lid is closed and locked)
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Weight	4 kg
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### Operating conditions

Operating temperature	0 ... +50 °C
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Storage humidity	< 90 %
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Storage temperature	-20 ... 50 °C
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Transport temperature	-20 ... 50 °C
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# Ordering

Please use the following tables to assist in placing your order with our sales staff.



## Data logger

P560 5100	S551-P4, Portable Display and Data Logger, 4 digital input channels, power cord, USB cable, S4A software, CAA software
P560 5101	S551-P6, Portable Display and Data Logger, 4 digital input channels and 2 analog, power cord, USB cable, S4A software, CAA software
A1670	USB 4G dongle for S551/S600, including S4A software

## Flow sensors

S601 0401	S401, 300 mm Shaft, insertion type thermal mass flow meter, max measuring range, DN15 ... DN300, Modbus/RTU, including 5 m cable with connector to S551
S601 0430	S430, 220 mm Shaft, insertion type Pitot tube flow meter for wet air, DN25 ... DN250, Modbus/RTU, including 5 m cable with connector to S551

## Dew point sensor

S601 0215	S215 Dew Point Transmitter, -20 ... +50 °C Td, Measuring chamber with quick coupling, 5 m cable with connector to S551
S601 0211	S211 Dew Point Transmitter, -60 ... +20 °C Td, Measuring chamber with quick coupling, 5 m cable with connector to S551
S601 0220	S220 Dew Point Transmitter, -100 ... +20 °C Td, Measuring chamber with quick coupling, 5 m cable with connector to S551

## Pressure sensors

S694 1886	Pressure Transmitter, 0 ... 1.6 MPa(g), 4 ... 20 mA including a 5 m cable with connector to S551 (works only on S551-P6)
S694 0356	Pressure Transmitter, 0 ... 4.0 MPa(g), 4 ... 20 mA including a 5 m cable with connector to S551 (works only on S551-P6)
S694 1887	Pressure Transmitter, 0 ... 1.6 MPa(g), Modbus/RTU including a 5 m cable with connector to S551 (works on S551-P4 & P6)
S694 1888	Pressure Transmitter, 0 ... 4.0 MPa(g), Modbus/RTU including a 5 m cable with connector to S551 (works on S551-P4 & P6)

## Amp sensor

S554 0156	Electrical Current Transmitter, 1000A, 100 mm diameter, including connector to S551
S554 0157	Electrical Current Transmitter, 3000A, 150 mm diameter, including connector to S551

## Temperature sensor

S693 0005	Temperature Transmitter, -50 ... +200 °C, 4 ... 20 mA loop powered, 6 x 150 mm sensor tube, 5 m cable with connector
A554 6003	Compression fitting, 6 mm, G ½" thread, 0.6 MPa
A554 6004	Compression fitting, 6 mm, G ½" thread, 1.6 MPa

## Power meter (for 3 phase and single phase measurement)

P554 0134	Portable Power and Energy Meter S110-P, Modbus/RTU, including 4 test leads, 4 test clips, 5 m cable with connector to S551
S554 0160	Electrical Current Transmitter for S110-P, 1000 A, 100 mm diameter, 1.8 m cable, connector to S110-P
S554 0161	Electrical Current Transmitter for S110-P, 3000 A, 150 mm diameter, 1.8 m cable, connector to S110-P
S554 0162	Electrical Current Transmitter for S110-P, 100 A, 160 mm diameter, 1.8 m cable, connector to S110-P

Note: For 3 phases power supply 3 Rogowski coils are needed.

# Ordering

Please use the following tables to assist in placing your order with our sales staff.



## Other sensors / extensions

**P554 0080** 8 channel analog input extension, connectable to S551, including 5 m cable with connector, 2-wire sensors support only  
 Note: we offer other two models which supports 3-wire inputs and combination of 2-wire and 3-wire. Please contact the sales.

**A554 3314** Portable Modbus/RTU splitter box, with M12 connector

## Accessories

**A553 0103** Extension cable, 5 m, male-female connectors

**A553 0110** Open wires cable, 5 m cable with connector to S551

**A553 0111** Sensor cable, M12, 5 m with connector to S551

**A554 0035** Transport case S551 for sensors and cables, L560 x W450 x H160 mm (internal compartment can be arranged according to your individual sensor requirements)

**A554 0036** Transport case, customized for 1 x S110-P, 3 Rogowski coils, 4 x test leads, 4 x test clips, 1 x S430

\* Please contact us for further accessories and details.



[www.suto-itec.com](http://www.suto-itec.com)



[sales@suto-itec.com](mailto:sales@suto-itec.com)