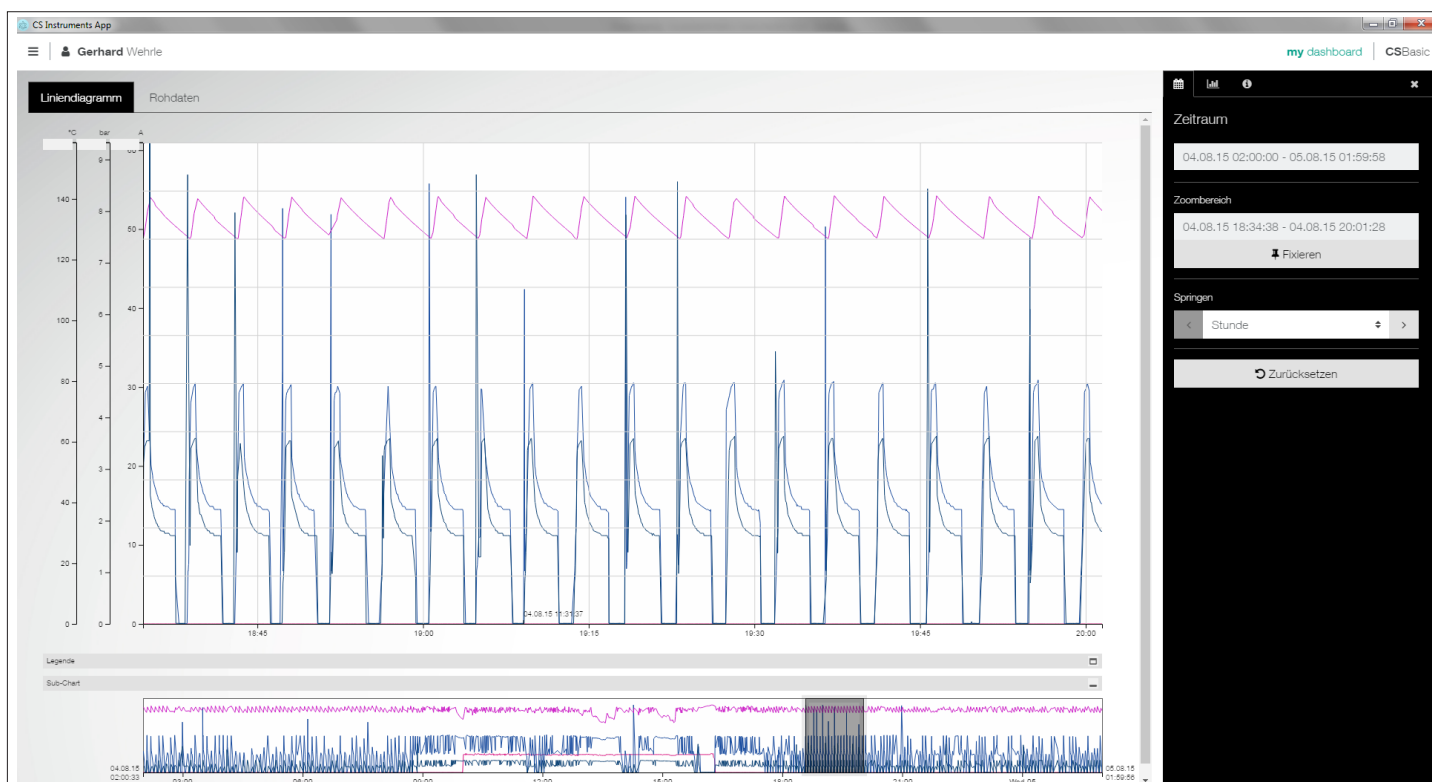


## CS Basic

With the CS Basic the paperless recorder DS 500/400 and all mobile devices with data logger can be read out. Depending on the device, data transfer is done either via USB stick or Ethernet connection.

## CS Network

The CS Network is a client-server solution. The server software automatically collects the data of all CS paperless recorders and CS sensors embedded in the company's computer network and stores them in a database. The evaluation / analysis of the measured data is carried out via the evaluation software (client) at any number of workstations.



	CS Basic	CS Network
<b>Installation</b>	Local PC installation	Server (virtual machine) Client (Browser-based)
<b>Data storage</b>	Database (local)	Database (Server, virtual machine)
<b>Updates to new releases free of charge</b>	Yes	Yes
<b>Automatic information about upgrades</b>	Yes (only in case of internet access)	Yes
<b>Number of working place licenses</b>	2	Unlimited
<b>Number of measured values</b>	All measured values transmitted by a device. (Max. 1 device at the same time)	Up to 20 / up to 50 / up to 100 / up to 200 measured values
<b>Data transfer</b>	USB Stick (manually) or Ethernet	Ethernet
<b>User administration</b>	No	Yes
<b>E-Mail in case of threshold value exceeding</b>	No	Yes
<b>Storage of the measured data</b>	Logger data have to be read-out manually via CS Basic	CS Network automatically stores the measured data of all connected devices

## Common functions:

### Graphic evaluation

All measuring curves are indicated in color. All necessary functions are integrated, like e. g. free zoom, selection/deselection of single measuring curves, free selection of periods, scaling of the axis, select colors and so on. This view can be stored as a PDF file and sent by e-mail. Different data can be combined in one common file.

### Table view

All measuring points are listed with exact time interval. The desired measuring channels with the name of the measuring place can be selected via the diagram explorer.

### Statistics

All required statistic data are visible at a glance. So the user can see very quickly which minimal or maximal measured values occurred when and for how long.

### Consumption report

The software issues a consumption report for all connected flow sensors, it can be selected if it should be daily, weekly or monthly.

### Data export to MS-Excel ® or csv

The measured data can be exported to Excel or csv.

### Tariffes

The price per consumption unit can be stored for each energy form. Depending on the time and the day different tariffs can be stored. The validity of the tariffs can be defined via calendar function in order to grant that price increased resp. decreases can be updated.

### Multi lingual

German, english and further languages are included in the scope of delivery.

### Alarm history / Alarm logfile

The exceeding of the limit values is documented with the CS Network.

### Administration of the measuring sites

Each CS sensor resp. each CS chart recorder can be allocated to a department/hall (resp. cost centers).

## Optional add-on modules:

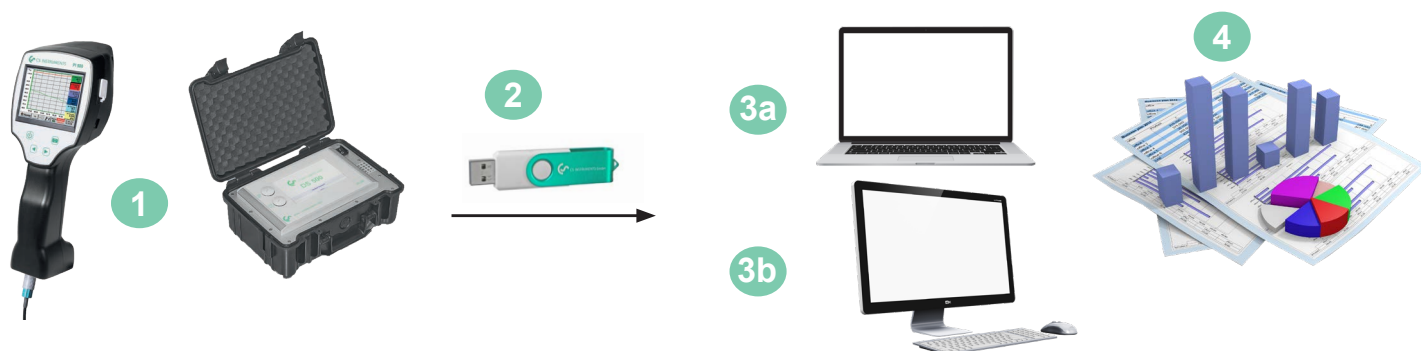
### Module „formular-editor“

By means of the formula editor e. g. the measured values of 2 sensors can be totaled or subtracted from each other.



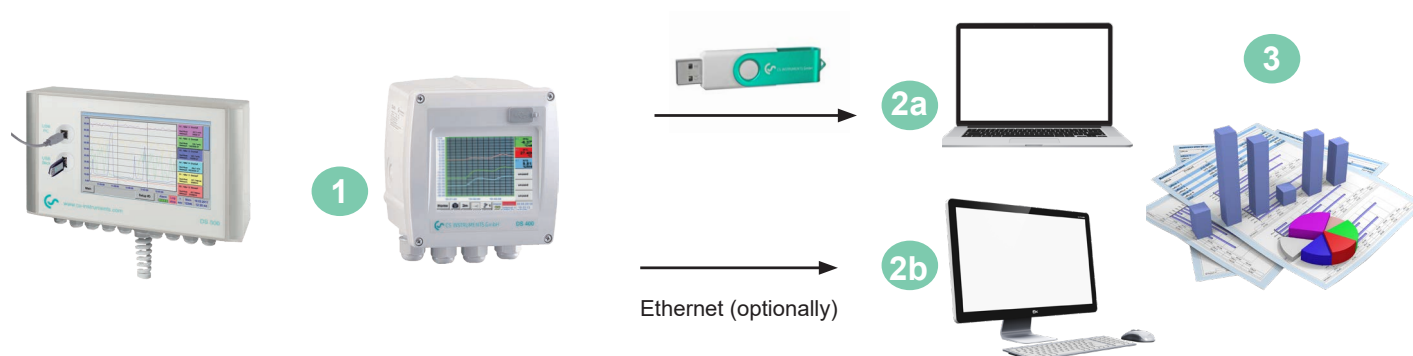
## CS Basic

Data evaluation for mobile measurement:



- 1 Mobile measurement at the customer. Measured data are saved in the data logger in the selected measuring cycle
- 2 Export of the data to the USB stick
- 3a Import of the measured data to the laptop directly on-site
- 3b Import of the measured data to the computer in the office
- 4 Evaluation and print out of the measured data

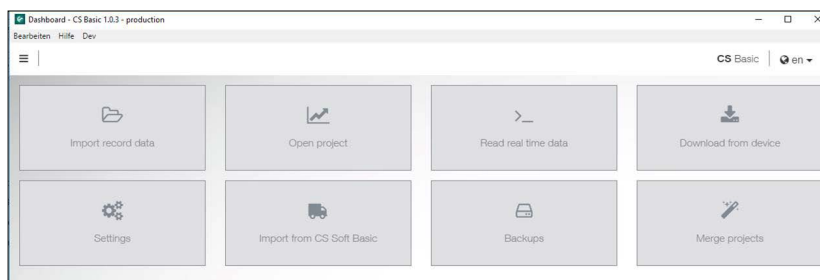
Data evaluation for fix installed chart recorder in the company:



- 1 Chart recorder is fix installed in the company. Measured data will be saved in the data logger in the selected measurement cycle
- 2a Transfer the data via USB stick to the computer
- 2b Readout of the logger data via the computer network (LAN) by means of CS Basic
- 3 Evaluation and print out of the measured data

DESCRIPTION	ORDER-NR.
CS Basic - data evaluation in graphic and table form - readout of the measured data via USB or Ethernet. License for 2 working places	0554 8040
Additional license for 1 further working place	Z554 8040
Module „Formula Editor“ – by means of the formula editor the measured data and constants can be calculated (addition, subtraction, division, multiplication, root function, exponentiation)	Z554 8010
Upgrade CS Soft Basic (0554 7040) to CS Basic (0554 8040). CAA module is not available any more. Please state old license key when ordering	Z554 8041

# CS Basic



## Intuitive operation

All important functions can be retrieved via the dashboard.

- Global Settings: Adjust units and change decimal places, store company name and logo
- Import real-time data: Establish Ethernet connection to CS logger or sensor. Trace real-time measured data in graphic and in table form
- Import from CS Soft Basic: Data migration from the previous version of CS Soft Basic
- Data backup: Backup of the projects and the database



## Graphic evaluation

All measurement curves are indicated in terms of color. All necessary functions like free zoom, selection/deselection of single measured curves, free selection of periods, scaling of the axes, selection of colors and so on are

integrated: This view can be stored as pdf file and sent by e-mail. Different data can be merged to one common file.

		A2.1	B3.1	B3.2	B3.3
		Pressure	Dewpoint		
Date	Device	A2a	DewPoint	Rel.Humid.	Temperatur
27.01.17 13:52:18	0	9,6749	-50,6462	0,1534	20,2556
27.01.17 13:52:28	0	9,676	-51,4187	0,1394	20,2517
27.01.17 13:52:38	0	9,6769	-52,0952	0,128	20,2499
27.01.17 13:52:48	0	9,678	-52,791	0,1173	20,2479

## Table view

All measuring points are listed with the exact time interval. The desired measuring channels with the measuring site name can be selected via the diagram explorer.

Channel	Average	Minimum	Date of minimum	Maximum	Date of maximum
A2.1 Pressure - A2a (bar)	9.6518 bar	9.61 bar	13.02.17 13:29:48	9.6361 bar	13.02.17 13:23:08
B3.2 Dewpoint - Rel.Humid. (%)	0.1094 %	0.0895 %	13.02.17 14:40:28	0.4118 %	13.02.17 14:30:08
B3.1 Dewpoint - DewPoint (°Ctd)	-53.2784 °Ctd	-57.9552 °Ctd	27.01.17 13:54:38	-41.6251 °Ctd	13.02.17 14:38:08

## Statistics

All necessary statistics data are apparent at a glance. So the user can quickly see which minimum or maximum measured values occurred at which time and for how long.

		January	February	March	April	May	June	July	August	September	October	November	December	Sum
A1.2 Verbrauch Halle 1 - A1b (m³)	Start (m³)	1.958.827	2.076.325	2.215.062	2.368.464	2.514.612	2.666.480	2.826.483	3.002.938	3.169.484	3.318.642	3.491.661	3.659.617	
	End (m³)	2.076.325	2.215.062	2.368.464	2.514.612	2.666.480	2.826.483	3.002.938	3.169.484	3.318.642	3.491.661	3.659.617	3.775.973	
	Consumption (m³)	117.498	138.737	153.402	146.148	151.868	160.003	176.455	166.546	149.158	173.019	167.956	116.356	1.817.146
	Cost (€)	2.232.46	2.836.00	2.914.64	2.776.61	2.885.49	3.040.06	3.352.65	3.164.37	2.834.00	3.287.36	3.191.16	2.210.76	34.525.774
A1.1 Verbrauch Halle 1 - A1a (m³/h)	Minimum (m³/h)	0	6,3	0	0	0	1,36	0	0	0	0	0	0	
	Average (m³/h)	157,6	205,98	205,8	202,54	203,52	221,66	236,5	223,25	206,67	232,19	232,67	155,99	
	Maximum (m³/h)	1.060,36	527,02	736,39	1.154	662,43	618,27	617,9	636,36	931,66	642,96	669,77	2.410,71	

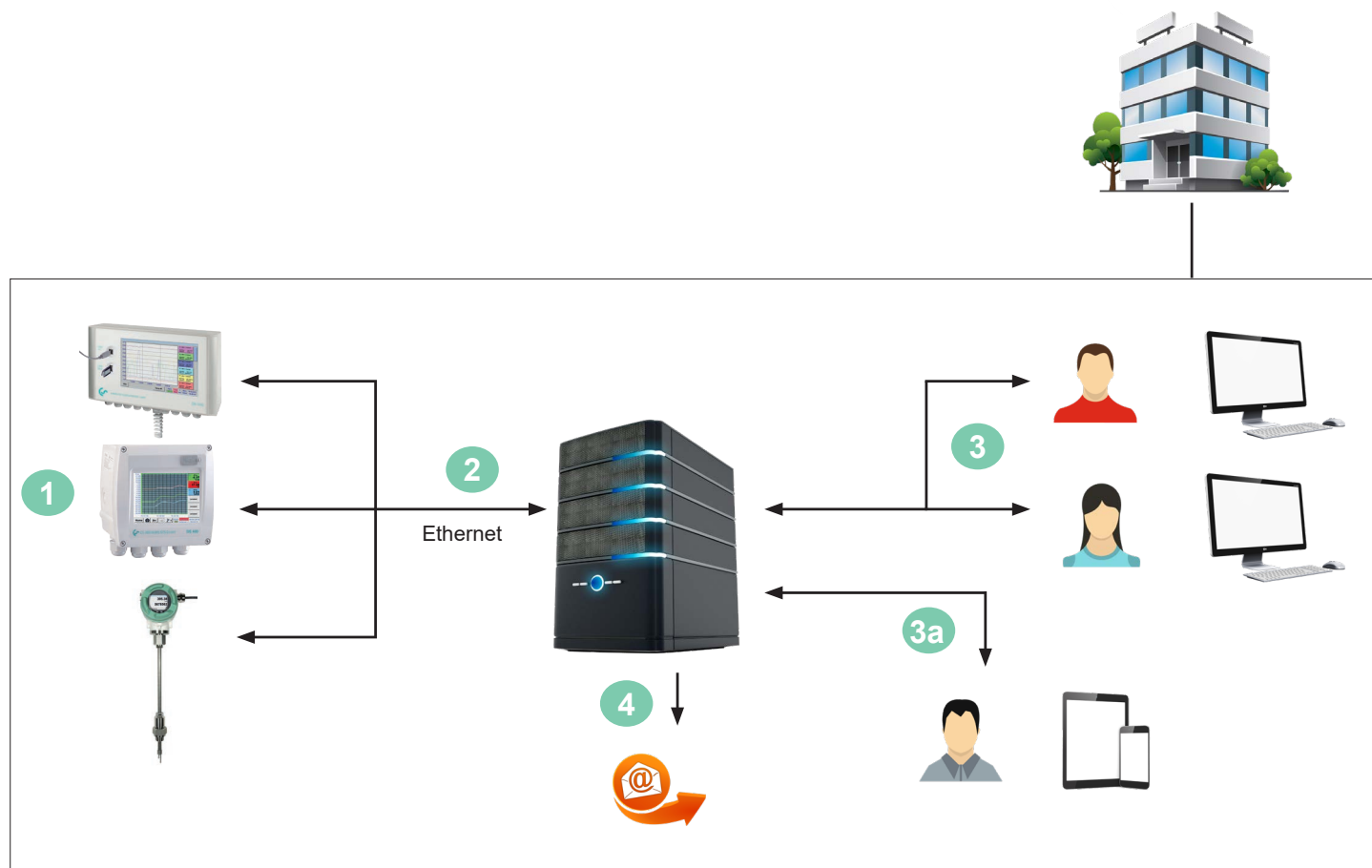
## Flow evaluation

The software carries out flow analysis for all connected flow sensors optionally as daily, weekly or monthly report.



## CS Network

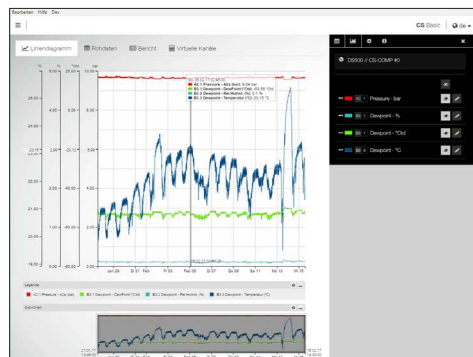
Energy monitoring for compressed air and gases in an enterprise



- 1** Single sensors with Ethernet interface or chart recorders with several sensors measure the compressed air and gas consumption of all departments/cost centers in an enterprise.
- 2** The CS Network (Server Installation) automatically collects the measured values of all CS chart recorders and CS sensors which are connected to the computer network in an enterprise and stores them in a database.
- 3** The evaluation/analysis of the measured data is effected via the evaluation software (Client) at an unlimited number of working places.
- 3a** The evaluation software (Client) is browser-based and provides the user quick access to the measured data via tablet or smart-phone.
- 4** In case of an exceeding of the limit values (freely adjustable) there will be an automatic alarm via e-mail

# CS Network

Energy monitoring for compressed air and gases in an enterprise




## Graphic display with zoom function:

- Selection of the measured data to be indicated
- Easy zoom in and zoom out
- Up to 8 y-axes
- Quick access to daily/weekly/monthly view



## View: Current measured values

- Load background image
- Place/fix measured values screen
- Red measured values in case of alarm exceeding
- Quick access to measured value history

		January	February		November	December	Total
<b>A1.2 consumption on hall 1 – A1b (m³)</b>	<b>From (m³)</b>	1.958.827	2.076.325		3.491.661	3.659.617	
	<b>To (m³)</b>	2.076.325	2.215.062		3.659.617	3.775.973	
	<b>Consumption (m³)</b>	117.498	138.737		167.956	116.356	1.817.146
	<b>Costs (€)</b>	2.232,46	2.636,00		3.191,16	2.210,76	34.525,774

DESCRIPTION	ORDER-NR.
CS Network – energy monitoring with client/server solution (Max. 20 measured values of different sensors/devices)	0554 8041
CS Network – energy monitoring with client/server solution (Max. 50 measured values of different sensors/devices)	0554 8042
CS Network – energy monitoring with client/server solution (Max. 100 measured values of different sensors/devices)	0554 8043
CS Network – energy monitoring with client/server solution (Max. 200 measured values of different sensors/devices)	0554 8044
Module «Formula Editor» - with the formula editor, the measured values and constants can be calculated together (addition, subtraction, division, multiplication, root function, exponentiation)	Z554 8010
Module „Cockpit Function“ – By means of the Cockpit Function you can issue your personal background layout for the online values	on request
Module „Automatic Consumption Evaluation“ is e-mailed to a distribution list at the end of the month	on request
Module „Bar Chart, Pie Chart“ for annual comparison	on request