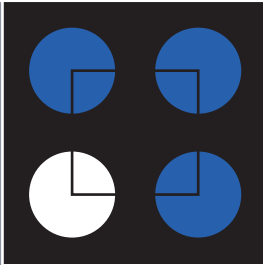


**B&S**  
Power Division

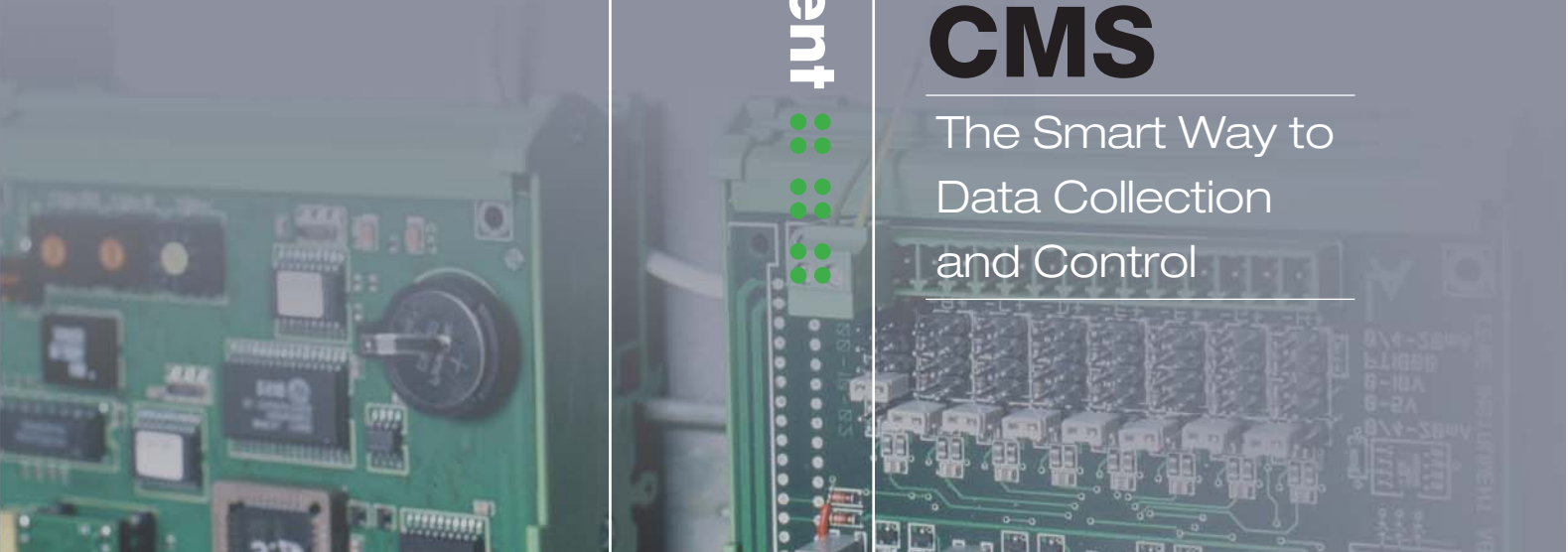


energy management



# CMS

The Smart Way to  
Data Collection  
and Control





# CMS

**CMS is the system that combines the measuring hardware and presentation software together.**

CMS is a versatile product, the main purpose of which is to receive and process measurement data from different types of sensor or meter. It can be used for monitoring and control in a given application and/or it can be connected to a master system for the compilation and presentation of measurement data. CMS works equally well in simple "standalone" solutions as in complete solutions with communication and software for different types of presentation.

## Product range

### Article Description

5060	<b>CAU 200</b> , CPU unit
5069	<b>CAP 200</b> , Power supply board 15 -3 6 V DC/15-24 V AC
5061	<b>CAP 200E</b> , Power supply board 12-15 V AC/DC
5062	<b>CAC 200</b> , Communication unit
5063	<b>CAI 208E</b> , Input board, 8 digital, 10-100 V DC, 10-70 V AC
5064	<b>CAI 208</b> , I/O board, 8 digital inputs and/or outputs
5065	<b>CAI 280</b> , Input board, 8 analog
5067	<b>CAO 210</b> , Output board, 1 analog
5070	<b>CAR 200</b> , Repeater
3044	<b>M202</b> , I/O board, 1 digital input, 1 digital output Accessories
784801	<b>G4IAC5A</b> , Input module, 180-280 V AC
784806	<b>G4IDC5</b> , Input module, 10-32 V DC
784807	<b>G4IDC5MA</b> , Input module, 10-32 V DC with manual switch
784802	<b>G4OAC5</b> , Output module, 12-140 V AC
784803	<b>G4OAC5MA</b> , Output module, 12-140 V AC with manual switch
784804	<b>G4OAC5A</b> , Output module, 24-280 V AC
784805	<b>G4OAC5AMA</b> , Output module, 24-280 V AC with manual switch
784808	<b>G4ODC5</b> , Output module, 5-60 V DC
784809	<b>G4ODC5MA</b> , Output module, 5-60 V DC with manual switch
784810	<b>G4ODC5A</b> , Output module, 5-200 V DC
7559	<b>Converter</b> loop/RS232
5071	<b>Cable</b> - CAU-CAI/CAI-CAI/CAP-CAI/CAP-CAC
5072	<b>Cable</b> - CAP-CAU-CAC

### Article Description

5073	<b>CAB</b> Branch connector for bus connection
5074	<b>Cable</b> CAC-modem Westermo TD22
5079	<b>Transformer</b> 230/24 V AC, DIN rail mounting
5078	<b>Lead-acid accumulator</b>

## Spare parts

773002	<b>Bus interface board</b> IBTTLMIN
693303	<b>Button cell 3 V/60 mAh</b> for memory backup CAC 200 and CAU 200



# B&S

B&S Power B&S Electronic services B&S Technical services

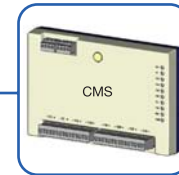
## Measures

CMS can be fitted with analog and digital inputs. Here, analog signals means DC signals from different types of sensor, transducers, etc. Examples of such signals are 4-20 mA, 0-10 V DC and so on. Digital signals may be pulses from a meter or sensor measuring some form of consumption. Examples of such meters are electricity, heat, gas and water meters. A digital signal can also be a status signal, in other words a signal that represents off or on. Whatever the signal, the information is logged and stored in CMS.



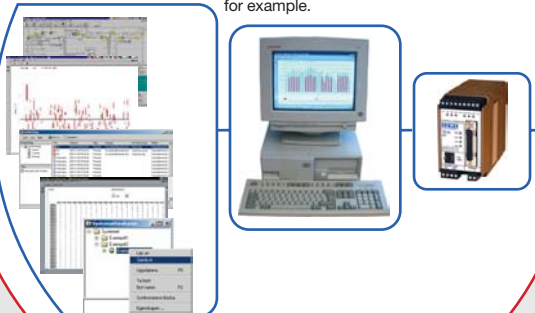
## Processes

Collected measurement data are stored in CMS. As well as being able to store data in trend curves with different integration times, CMS can be programmed to perform types of command, for example to control power peaks or mean power values. CMS sends signals on one or more outputs to divert certain loads, thus reducing the power used. This type of load control may lead to significantly improved cost-efficiency, in the form of reduced costs for power subscriptions. It also gives a smoother and better balanced network.



## Presents

There is often a need to collect data from an installation and send it to a PC for further evaluation and analysis. With the B&S system philosophy there are many possible solutions in the form of different communication media such as signal cable, phone, GSM, radio and wireless for example. CMS can also initiate communication by itself. Among other things, it can be configured to send alarms directly to an operator interface directly to a remote monitoring centre, via GSM for example.



## Communicates

Measurement data can be presented locally in the plant via display modules or collected to a central PC. The software programs are called Cetrics and InfoBase. With these, the installation can be monitored instantaneously in process displays on the screen, and commands can be given via pushbuttons on the display. Trend curves can be analysed and compared with each other to give a good overview of events in the plant. Quantities of statistical information can be generated. This information can be used as a basis for billing or when deciding on future investments in the plant.



## Power Industry Premises

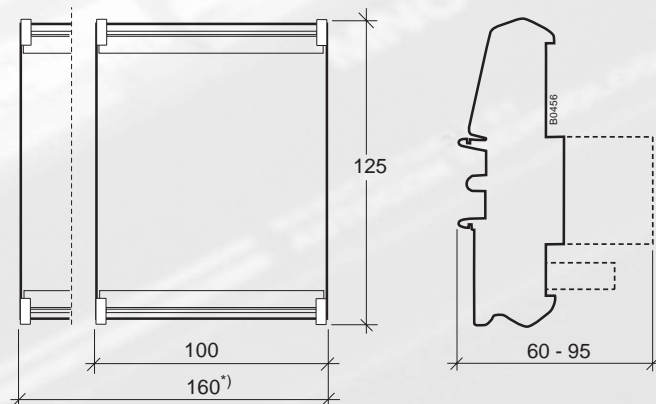
## CMS in systems



### Technical data

<b>Power supply:</b>	5 V DC, 100 mA
<b>Temperature range:</b>	0-55 °C
<b>Interface 1:</b>	Current loop, InfBus LAN
<b>Cable type:</b>	Twisted pair two-core cable, shielded in some cases. Max 1.5 mm.
<b>Transmission distance:</b>	Depends on cable resistance, max 70 ohm
<b>Repeater:</b>	Used at cable resistance >70 ohm or with more than 15 units on the loop.
<b>Capacity CAU 200:</b>	36 000 historic readings distributed over 24 trend curves 50 alarms, freely configurable 50-year clock 48 signals real-time clock 8 telephone numbers 8 destination lists calendar, 12 months log list with the last 100 alarm events in CAU
<b>Number of I/Os per CAU 200:</b>	0-48 signals
<b>Analog inputs:</b>	0-5 V 0-10 V Pt 1000 0-20 mA 4-20 mA
<b>Measurement accuracy:</b>	16 bits
<b>Battery backup button cell:</b>	>55 days
<b>Mounting:</b>	DIN rail

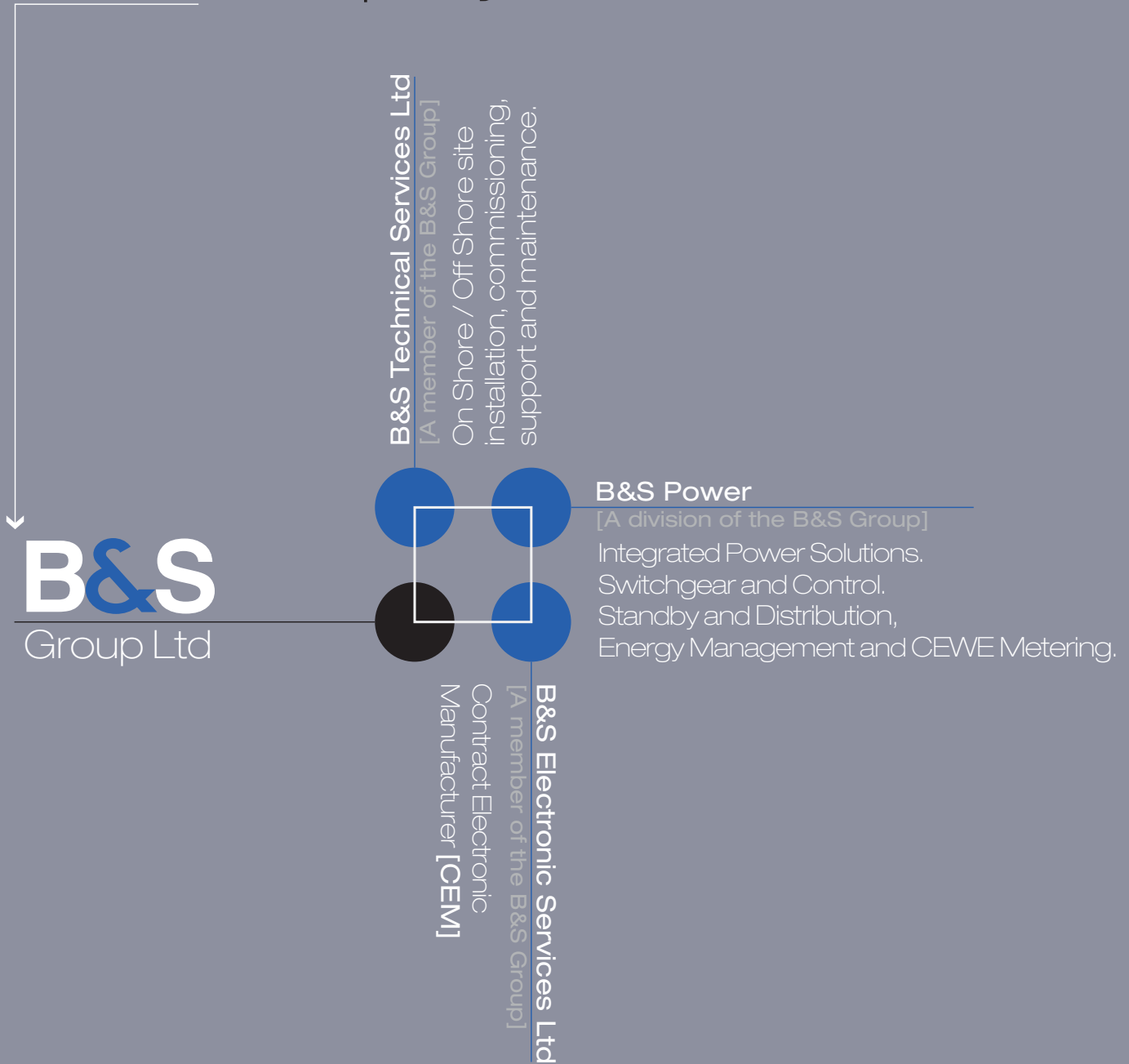
### Dimensions (mm)



# B&S

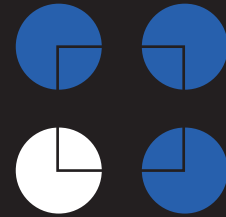


# B&S company structure



# B&S

Power Division



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