

DCB 4.0 - the hardware

The Data Communication Box 4.0 is delivered with:

- an active simcard with global coverage (option: international waters)
- gecombined GPS/LTE puck antenna 5 m
- DIN rail clip
- ethernet cable 1,5 m.

The main technical specifications:

- communication by 2G/3G and 4G
- GPS is standard available
- Ethernet/RS232/RS422/RS485 and 4IO
- 1 GB intern memory
- 6 leds for status indication
- complies with industry standards and CE/FCC certifications.



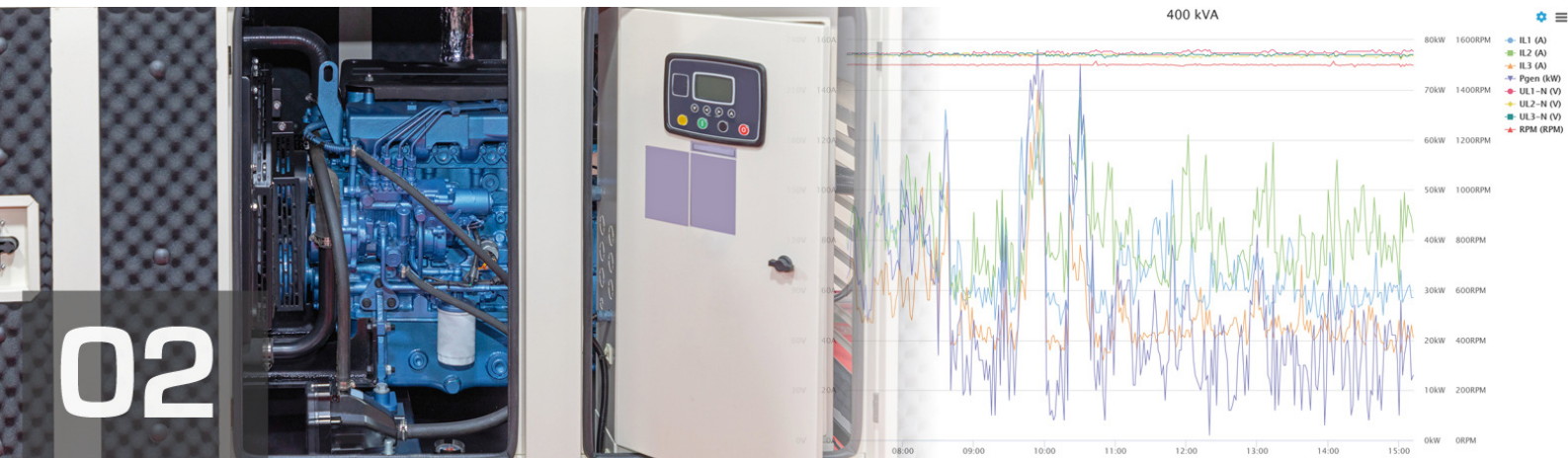
Plug & Play

- the DCB 4.0 is delivered plug & play (inclusive active simcard).
- this means that the DCB 4.0 is configured by us for the Woodward controller and peripherals you want to monitor. No need for programming the DCB 4.0.
- we can change the configuration remotely, if you decide to use a different controller, should that be desired (free of charge).
- after the DCB 4.0 is connected to the power supply and to the Woodward controller, a mobile connection is established, making the data immediately visible on the web portal.

Optional:

- VPN
- customized API connection
- Node-RED
- Canbus.





02

Standard available functions

Alarms / alarm management

The alarm module allows you to create your own alarm conditions. You can:

- in addition to single alarm conditions, also set combined alarm conditions
- add a delay (the time that an alarm condition must meet before an alarm notification is sent)
- compose the text of the alarm notification yourself
- activate or deactivate alarm conditions (temporarily)
- select from the contact book the persons who should to receive the alarm notifications (via SMS, Telegram or by mail)
- simply copy alarm rules to other objects (subscriptions).

Fuellevel

General Advanced Condition Subscriptions

i Alarm rule will go off when **all** of the conditions are met. Edit

Fuel + AdBlue » Fuellevel < 30 % ✎ ✖

EMCP 4.2 » DCB Online = Active ✎ ✖

Add condition

User management

User management allows you to:

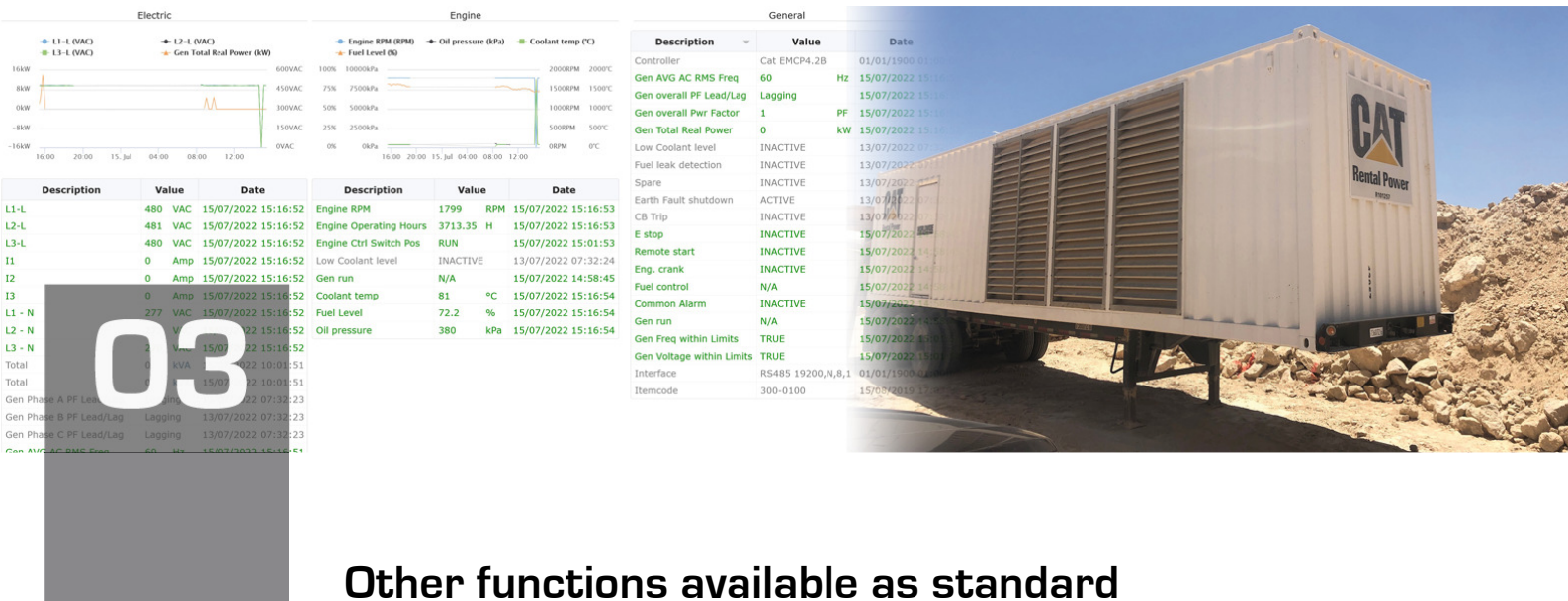
- create and manage user accounts
- specify which objects may be shown
- specify which reports an account may see or create
- specify the rights/permissions an user account has.

Extensive reporting and analysis functions

Via the web portal you have extensive reporting and analysis functions:

- all data collected by the DCB 4.0 will be stored for at least 1 year
- data can be displayed on the screen
- data can be exported in Excel, PDF or Word format.

Group: 2 - Depots		Properties	Users	Objects	Reports	Permissions
Permissions						
» Management - VPN						
» Messages						
» Alert overview (custom)						
» Message - conditions						
Advanced Message conditions						
Create/Copy new message condition						
Delete						
Disable						
Edit						
Message Dispatch						
» Reports 3.0						
Actions						
Data Highspeed						
Base right Sub-Objects						



Other functions available as standard

Available functions:

- mobile web app available
- time zones per account
- geofencing per object/machine
- besides SMS and email now also Telegram available for alarm notifications
- indication of GPS and mobile signal strength
- adjustable alarm if connection is lost for more than x minutes
- function " show route", to see the movement of a machine over a selected periode in time.
- "Data High Speed" function. By activating this function, for a limited period of e.g. 30 minutes, data is collected and transmitted at a high frequency.

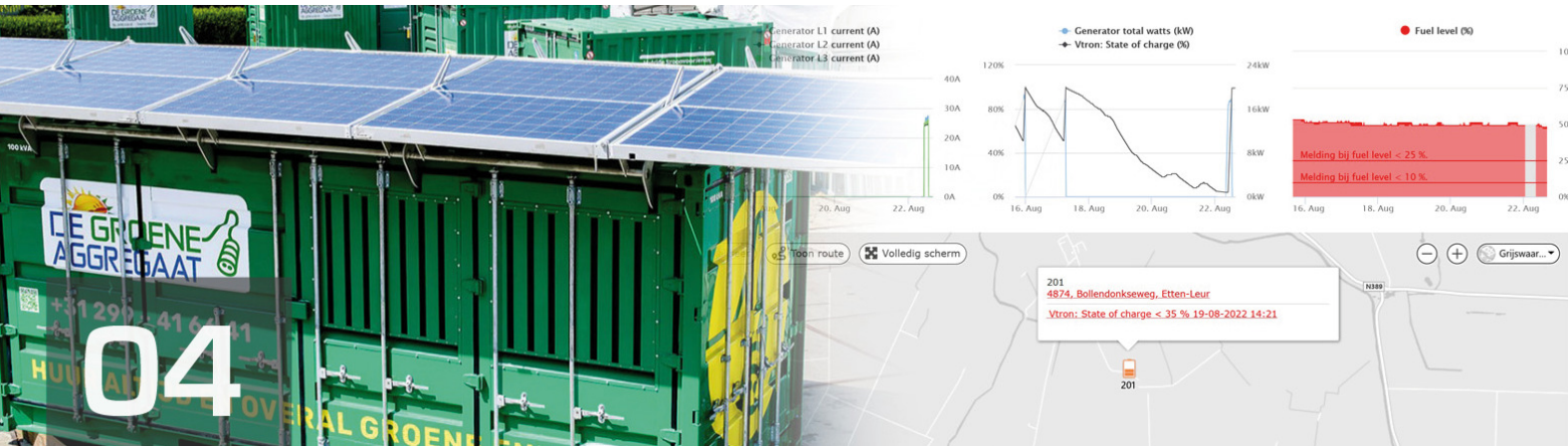
Options:

- data is stored on a server in the Netherlands. If required, data can also be stored on a server in Germany
- the web portal can be offered in your company's look-and-feel. The complete remote monitoring system (hardware and web portal) can be also be offered as OEM/branding
- VPN is available. A secure connection can easily be established via the web portal
- in addition to sim cards for "normal" use, we also supply sim cards with a data bundle for high data consumption as required for VPN or sim cards for use in international waters.

Projects

The purpose of the module Projects is that resources can be pooled.

- several machine/objects can be assigned to a project.
- after a status change in the project, the applicant/requestor of a project is automatically informed.
- all persons involved in the project receive a link to a protected part of the web portal and can quickly retrieve the latest status (also mobile).
- after completion of the project, all data can be easily aggregated from the machines deployed.



Data Woodward easYgen controller

The data fields below are read from the controller.

easYgen				
Data	Common	Settings	Alarmrules	DCB configuration
Description	Value			Date
01.01 Alarm class A latch	<input type="checkbox"/>			12-8-2023 11:25:33
01.02 Alarm class B latch	<input type="checkbox"/>			12-8-2023 11:25:33
01.03 Alarm class C latch	<input type="checkbox"/>			12-8-2023 11:25:33
01.04 Alarm class D latch	<input type="checkbox"/>			12-8-2023 11:25:33
01.05 Alarm class E latch	<input type="checkbox"/>			12-8-2023 11:25:33
01.06 Alarm class F latch	<input type="checkbox"/>			12-8-2023 11:25:33
01.11 New Alarm triggered	<input type="checkbox"/>			12-8-2023 11:25:33
AI Aux excitation D+	28,1	V		17-8-2023 09:48:44
Analog 1	95,9			17-8-2023 09:48:44
Analog 2	-			17-8-2023 09:48:44
Analog 3	-			17-8-2023 09:48:44
Analog 4	0			17-8-2023 09:48:44
Analog 5	0			17-8-2023 09:48:44
Analog 6	0			17-8-2023 09:48:44
Battery Voltage	28,4	V		17-8-2023 09:48:44
Busbar Frequency	49,94	Hz		17-8-2023 10:01:16
Busbar Voltage L1-L2	400	V		17-8-2023 10:01:16
Busbar Voltage L1-N	0	V		17-8-2023 10:01:18
Busbar Voltage L2-L3	0	V		17-8-2023 10:01:18
Busbar Voltage L2-N	0	V		17-8-2023 10:01:18
Busbar Voltage L3-L1	0	V		17-8-2023 10:01:18
Control mode	AUTO			16-8-2023 10:41:48
Coolant temperature	100	°C		3-2-2020 12:06:00
Days until next mainten.	0	days		25-4-2022 12:45:35
Discrete input 01	<input type="checkbox"/>			1-1-1900 01:00:00
Discrete input 02	<input type="checkbox"/>			1-1-1900 01:00:00
Discrete input 03	<input type="checkbox"/>			1-1-1900 01:00:00
Discrete input 04	<input type="checkbox"/>			1-1-1900 01:00:00
Discrete input 05	<input type="checkbox"/>			1-1-1900 01:00:00
Discrete input 07	<input type="checkbox"/>			1-1-1900 01:00:00
Discrete input 08	<input type="checkbox"/>			1-1-1900 01:00:00
Discrete input 09	<input type="checkbox"/>			1-1-1900 01:00:00
Discrete input 10	<input type="checkbox"/>			1-1-1900 01:00:00
Discrete input 11	<input type="checkbox"/>			1-1-1900 01:00:00
Discrete input 12	<input type="checkbox"/>			1-1-1900 01:00:00
Discrete input 6	<input type="checkbox"/>			1-1-1900 01:00:00
Engine Coolant Temp	27	°C		17-8-2023 09:48:44

Engine Oil Pressure	300	KPa		17-8-2023 09:48:44
Engine Speed	1499	rpm		17-8-2023 09:48:44
Engine, nr of start req	736			17-8-2023 10:03:44
Event History				1-1-1900 01:00:00
External Analog 1	0	%		25-4-2022 12:45:35
External Analog 2	0	%		25-4-2022 12:45:35
External fuel tank 1	-	%		17-8-2023 10:03:43
External fuel tank 2	-	%		3-2-2020 12:06:00
Fuel level	964	L		17-8-2023 10:03:43
Gen. hours of operation	5448,45	h		17-8-2023 10:03:45
Gen. pos. react energy	38,08	Mvarh		17-8-2023 10:03:45
Gen. real energy	161,97	MWh		17-8-2023 10:03:45
Generator current L1	0	A		17-8-2023 10:03:46
Generator current L2	10	A		17-8-2023 10:03:46
Generator current L3	0	A		17-8-2023 10:03:46
Generator frequency	50,01	Hz		17-8-2023 10:04:16
Generator over current 1	<input type="checkbox"/>			25-4-2022 12:45:35
Generator over current 2	<input type="checkbox"/>			25-4-2022 12:45:35
Generator over current 3	<input type="checkbox"/>			25-4-2022 12:45:35
Generator over freq 1	<input type="checkbox"/>			25-4-2022 12:45:35
Generator over freq 2	<input type="checkbox"/>			25-4-2022 12:45:35
Generator over voltage 1	<input type="checkbox"/>			25-4-2022 12:45:35
Generator over voltage 2	<input type="checkbox"/>			25-4-2022 12:45:35
Generator overload IOP 1	<input type="checkbox"/>			25-4-2022 12:45:35
Generator overload IOP 2	<input type="checkbox"/>			25-4-2022 12:45:35
Generator power factor	1			17-8-2023 10:04:16
Generator under freq 1	<input type="checkbox"/>			25-4-2022 12:45:35
Generator under freq 2	<input type="checkbox"/>			25-4-2022 12:45:35
Generator under voltage 2	<input type="checkbox"/>			25-4-2022 12:45:35
Generator voltage L1 - L2	400	V		17-8-2023 10:04:47
Generator voltage L1-N	231	V		17-8-2023 10:04:47
Generator voltage L2 - L3	399	V		17-8-2023 10:04:47
Generator voltage L2-N	230	V		17-8-2023 10:04:47
Generator voltage L3 - L1	400	V		17-8-2023 10:04:47
Generator voltage L3-N	231	V		17-8-2023 10:04:47
Interface	RS232/RS485			7-7-2021 14:26:47
Mains current L1	0	A		19-9-2022 17:06:19
Mains decoupling	<input type="checkbox"/>			21-9-2022 13:29:30
Mains frequency	0	Hz		19-9-2022 17:06:19
Mains over freq 1	<input type="checkbox"/>			21-9-2022 13:29:30
Mains over freq 2	<input type="checkbox"/>			21-9-2022 13:29:30

Mains Phase rot. mismatch	<input type="checkbox"/>			21-9-2022 13:29:30
Mains Phase shift	<input type="checkbox"/>			21-9-2022 13:29:30
Mains power factor	1			19-9-2022 17:06:19
Mains under freq 1	<input type="checkbox"/>			21-9-2022 13:29:30
Mains under freq 2	<input type="checkbox"/>			21-9-2022 13:29:30
Mains under voltage 1	<input type="checkbox"/>			21-9-2022 13:29:30
Mains under voltage 2	<input type="checkbox"/>			21-9-2022 13:29:30
Mains voltage L1-L2	0	V		19-9-2022 17:06:19
Mains voltage L2-L3	0	V		19-9-2022 17:06:19
Mains voltage L2-N	0	V		19-9-2022 17:06:19
Mains voltage L3-L1	0	V		19-9-2022 17:06:19
Mains voltage L3-N	0	V		19-9-2022 17:06:19
Nom. real pwr in system	100	%		17-8-2023 10:05:47
Oil pressure	3276,7	bar		3-2-2020 12:06:00
Online	<input checked="" type="checkbox"/>			17-8-2023 09:48:41
Real pwr in system	1,54	%		17-8-2023 10:05:47
Res. real pwr in system	97,53	%		17-8-2023 10:06:19
Reverse/reduced power 1	<input type="checkbox"/>			25-4-2022 12:45:35
Reverse/reduced power 2	<input type="checkbox"/>			25-4-2022 12:45:35
Selection: Controllertype	3000			3-2-2020 15:55:59
Selection: Coolant temp	Engine coolant temp			25-11-2020 14:36:18
Selection: Ext. tank 1	Analog 2			3-2-2020 12:06:38
Selection: Ext. tank 2	Unknown			3-2-2020 12:06:38
Selection: Fuel level	Analog 1			3-2-2020 12:06:38
Selection: Oil pressure	Engine oil pressure			25-11-2020 14:36:18
State Display	In operation			16-8-2023 10:41:48
Total gen react power	5	kvar		17-8-2023 10:06:16
Total generator power	3	kW		17-8-2023 10:06:16
Until next maintenance	232	h		17-8-2023 10:03:44

Questions? Contact us for a demonstration or take a look on our website www.remotemonitoringenset.com.