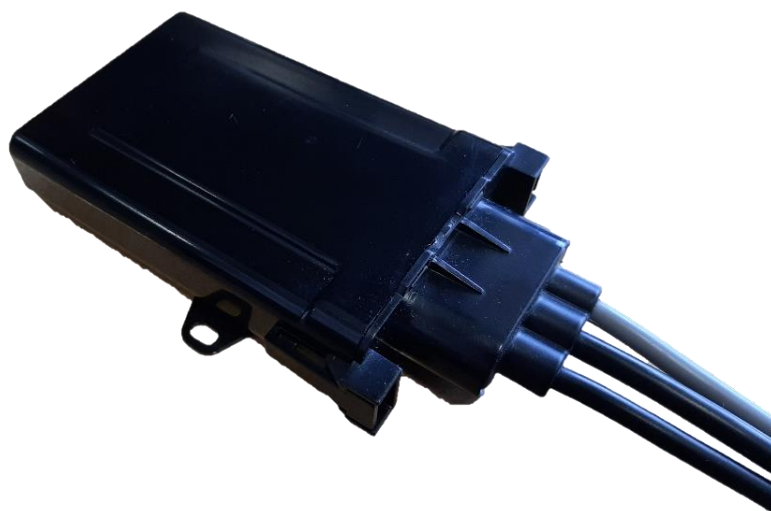




User manual / Data sheet

Brand	Model	Product Name
Inter-Data	Quectel EG25-G Manager V4 2G/3G/4G	Quectel EG25-G Manager V4 2G/3G/4G
Inter-Data	EG25-G Manager V4 2G/3G/4G	EG25-G Manager V4 2G/3G/4G



General product information:

The (Quectel) EG25-G Manager V4 is a GPS tracking system with 2G/3G/4G GSM communication, the extended version of the (Quectel) EG25-G FM03 2G/3G/4G with CAN-bus communication.

The system is developed especially to install into Dynapac road manufacturing machinery as rollers, pavers and feeders for tracking and monitoring.

The collected information is GPS location and time based events as start, stop and running hours of the machine as well CAN-bus information.



Operating Temperature:	-40°C ... +85°C (discharging) 0°C ... +45°C (charging)
Power supply:	Maximum range: +9 ... +31 VDC
Charging current:	Max 700mA. Observing 0°C ... +45°C safety range for Lithium Polymer.
Power consumption (standby):	<8mA GPS off, hot start possible. GSM modem off. Processor monitors timer + acceleration sensor + I/O. Watchdog on.
Power consumption (fully active):	<100mA GPS on. Data session open and sending data.
Housing:	IP67
Cable Length:	300mm
Dimensions:	79 x 131mm



Radio Hardware – wireless functions:

Modem:	Brand : Quectel Model : EG25-G TAC number(s) : 86186104 / 86792906 / 86516706
GSM antenna:	Internal

Frequencies supported:		
-- LTE-FDD	B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28	
-- LTE-TDD	B38/B39/B40/B41	
-- WCDMA/UMTS	B1/B2/B4/B5/B6/B8/B19	
-- GSM	B2/B3/B5/B8	
EIRP (Transmit Power)	Class	Modulation
	Class 4 (33 dBm $\pm$ 2 dB) for GSM850 Class 4 (33 dBm $\pm$ 2 dB) for EGSM900 Class 1 (30 dBm $\pm$ 2 dB) for DCS1800 Class 1 (30 dBm $\pm$ 2 dB) for PCS1900 Class E2 (27 dBm $\pm$ 3 dB) for GSM850 Class E2 (27 dBm $\pm$ 3 dB) for EGSM900 Class E2 (26 dBm $\pm$ 3 dB) for DCS1800 Class E2 (26 dBm $\pm$ 3 dB) for PCS1900 Class 3 (24 dBm +1/-3 dB) for WCDMA bands Class 3 (23 dBm $\pm$ 2 dB) for LTE-FDD bands Class 3 (23 dBm $\pm$ 2 dB) for LTE-TDD bands	GMSK GMSK GMSK GMSK 8-PSK 8-PSK 8-PSK 8-PSK QPSK and QAM QPSK and QAM QPSK and QAM
Bandwidth	LTE: Support 1.4/3/5/10/15/20 MHz RF bandwidth	
Channel Spacing	2G (GSM/GPRS/EDGE 200 kHz) LTE 100kHz.	
Modem certificates:	GCF (Global) CE (Europe) FCC/PTCRB (North America) IC (Canada) Anatel (Brazil) IFETEL (Mexico) CCC/SRRC/NAL (China)	KC (South Korea) NCC (Taiwan, China) JATE/TELEC (Japan) RCM (Australia) NBTC (Thailand) IMDA (Singapore) ICASA (South Africa)



Navigation:	Quectel EG25-G Integrated GNSS (GPS, GLONASS, BeiDou, Galileo)
GPS antenna:	Internal
Note(s):	Systems should be installed so that they are located at least 45cm (in open air) from the operator during normal use.
FCC Statement:	This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures: - Reorient or relocate the receiving antenna. - Increase the separation between the equipment and receiver. - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. - Consult the dealer or an experienced radio/TV technician for help. To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices). This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.



Modem Frequency range

LTE FDD			
LTE Band Number	Uplink Band (MHz)	Downlink Band (MHz)	EIRP (Transmit Power)
LTE Band 1	1920 - 1980	2110 - 2170	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 2	1850 - 1910	1930 - 1990	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 3	1710 - 1785	1805 - 1880	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 4	1710 - 1755	2110 - 2155	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 5	824 - 849	869 - 894	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 7	2500 - 2570	2620 - 2690	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 8	880 - 915	925 - 960	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 12	698 - 716	728 - 746	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 13	777 - 787	746 - 756	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 18	815 - 830	860 - 875	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 19	830 - 845	875 - 890	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 20	832 - 862	791 - 821	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 25	1850 - 1915	1930 - 1995	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 26	814 - 849	859 - 894	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 28	703 - 748	758 - 803	Class 3 (23 dBm $\pm$ 2 dB)

LTE TDD		
LTE Band Number	Frequency	Transmit Power
LTE Band 38	2570 - 2620 MHz	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 39	1880 - 1920 MHz	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 40	2300 - 2400 MHz	Class 3 (23 dBm $\pm$ 2 dB)
LTE Band 41	2496 - 2690 MHz	Class 3 (23 dBm $\pm$ 2 dB)



WCDMA/UMTS			
LTE Band Number	Uplink Band (MHz)	Downlink Band (MHz)	EIRP (Transmit Power)
LTE Band 1	1920 - 1980	2110 - 2170	Class 3 (24 dBm +1/-3 dB)
LTE Band 2	1850 - 1910	1930 - 1990	Class 3 (24 dBm +1/-3 dB)
LTE Band 4	1710 - 1755	2110 - 2155	Class 3 (24 dBm +1/-3 dB)
LTE Band 5	824 - 849	869 - 894	Class 3 (24 dBm +1/-3 dB)
LTE Band 6	830 - 840	875 - 885	Class 3 (24 dBm +1/-3 dB)
LTE Band 8	880 - 915	925 - 960	Class 3 (24 dBm +1/-3 dB)
LTE Band 19	830 - 845	875 - 890	Class 3 (24 dBm +1/-3 dB)

GSM						
Band number	GSM band	<i>f</i> (MHz)	Uplink (MHz) (mobile to base)	Downlink (MHz) (base to mobile)	EIRP (Transmit Power) GMSK	EIRP (Transmit Power) 8-PSK
5	GSM-850	850	824.2 – 848.8	869.2 – 893.8	Class 4 (33 dBm ±2 dB)	Class E2 (27 dBm ±3 dB)
8	E-GSM-900	900	880.0 – 915.0	925.0 – 960.0	Class 4 (33 dBm ±2 dB)	Class E2 (27 dBm ±3 dB)
3	DCS-1800	1800	1710.2 – 1784.8	1805.2 – 1879.8	Class 1 (30 dBm ±2 dB)	Class E2 (26 dBm ±3 dB)
2	PCS-1900	1900	1850.2 – 1909.8	1930.2 – 1989.8	Class 1 (30 dBm ±2 dB)	Class E2 (26 dBm ±3 dB)

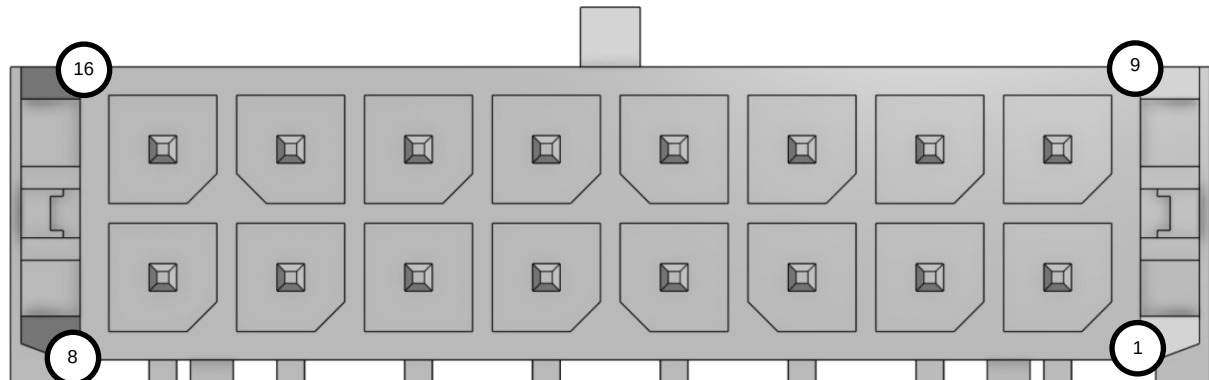


Interfaces:

2X CAN-Bus	Mode: NORMAL, SILENT or ONE_SHOT Speed: 20000, 33333, 50000, 83333, 100000, 125000, 250000, 500000 or 1000000
RS232	Baud: 600, 1200, 2400, 4800, 9600, 14400, 19200, 28800, 38400, 56000, 57600, 115200, 128000 or 256000
RS485	Baud: 600, 1200, 2400, 4800, 9600, 14400, 19200, 28800, 38400, 56000, 57600, 115200, 128000 or 256000



Internal Signal Connections:

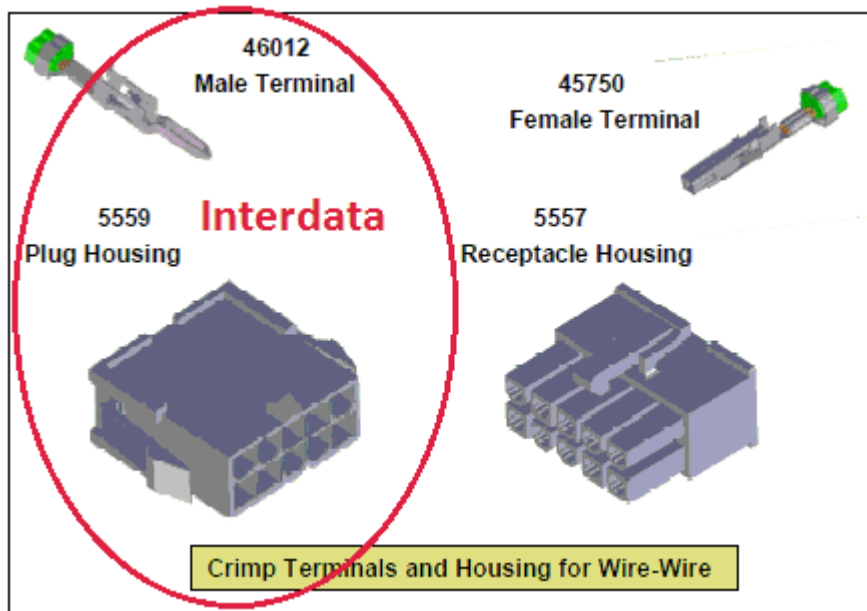


Pin:	Signal:	Wire Color:
Pin 1:	RS-485-A	Yellow
Pin 2:	RS-485-B	Brown
Pin 3:	In2/ ADC4	White
Pin 4:	In3/ Out1	Green
Pin 5:	In5/ ADC5	Blue
Pin 6:	1 Wire	Gray
Pin 7:	CAN2 L	Yellow
Pin 8:	CAN2 H	Brown
Pin 9:	RS-232 RX	Blue
Pin 10:	RS-232 TX	Green
Pin 11:	VCC (+6..31 VDC)	Red
Pin 12:	GND (Ground for VCC and I/O)	Black
Pin 13:	In4/ ADC3	Yellow
Pin 14:	Out2	Brown
Pin 15:	CAN L	Red
Pin 16:	CAN H	Black



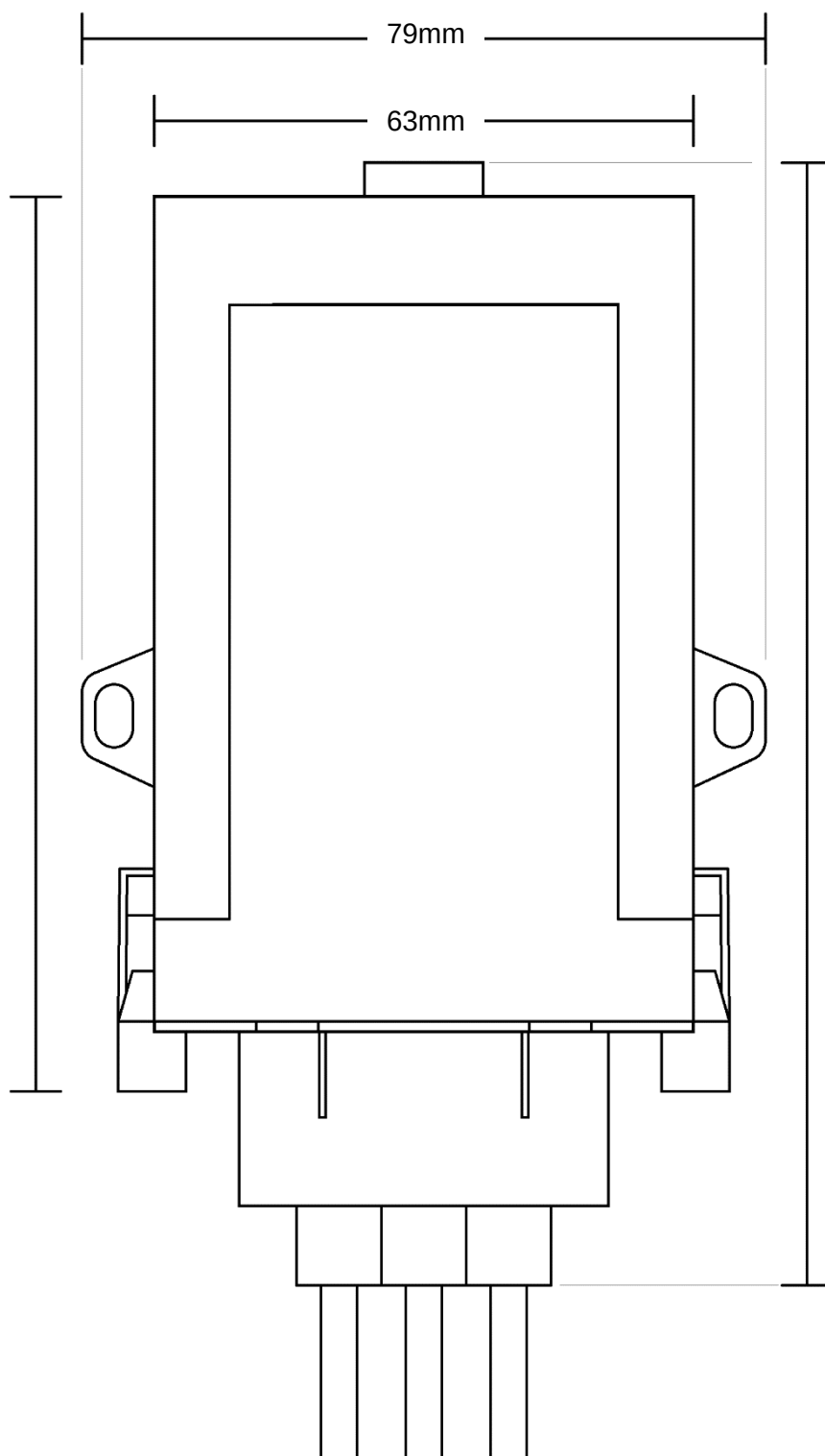
External Dynapac Connector:

Connector:	Molex Mini-Fit JR 8pol Dual Row 5559 Plug Housing
Cable length:	300 mm
Pin:	Signal:
Pin 1:	VCC +30
Pin 2:	GND +31
Pin 3:	General Alert
Pin 4:	Machine running +15
Pin 5:	CAN L
Pin 6:	CAN H
Pin 7:	Not connected
Pin 8:	Run Control (RFL)





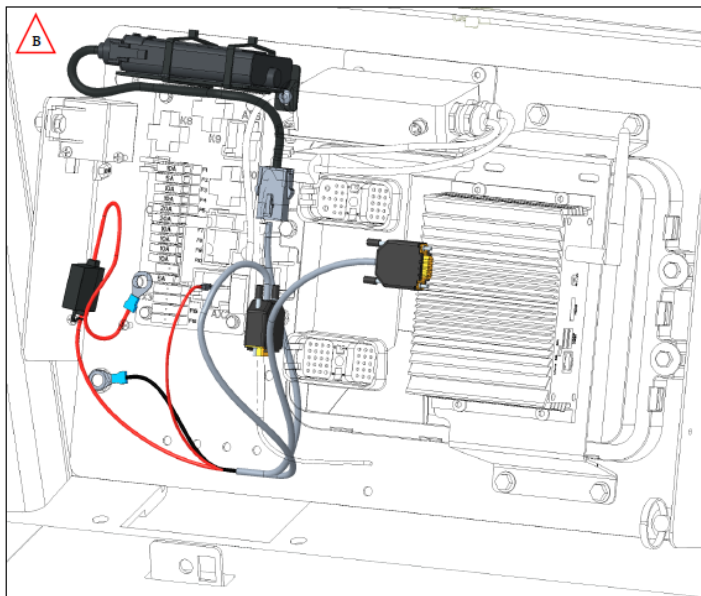
Dimensions:





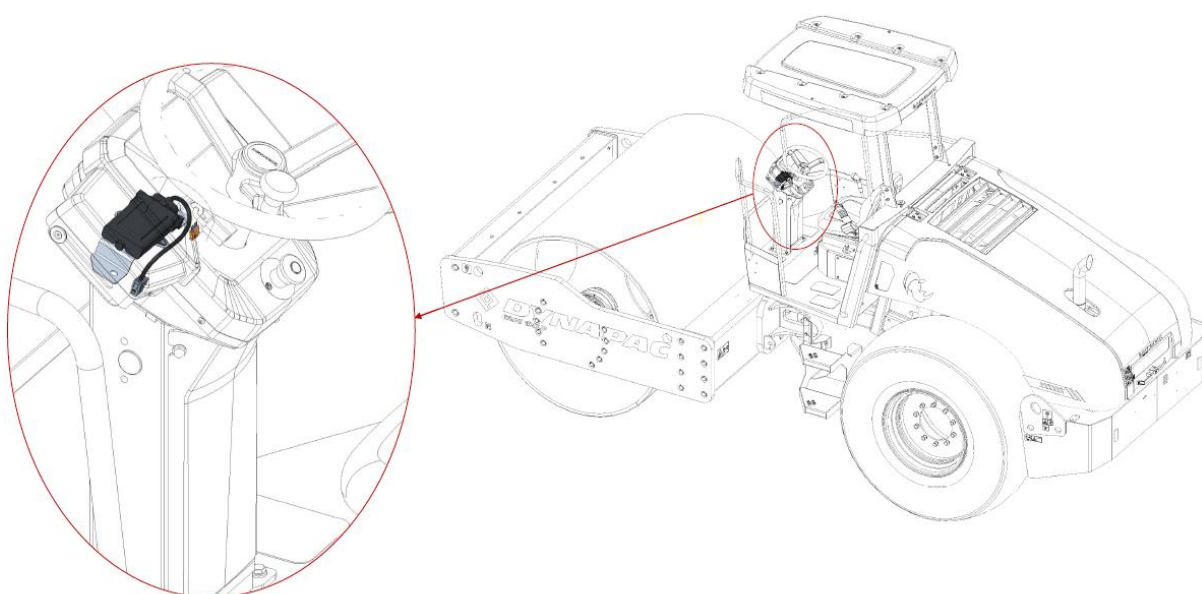
Installation:

Installation can only be done by qualified Dynapac Employees into Dynapac machines



Valid for CC2200-6200 and CG2300
Showing the Dyn@link Advanced placed on the ECU-bracket, in the rear of the cab or the ROPS platform. The rear cover is removed in the picture.

Installation Model CA25-CA35

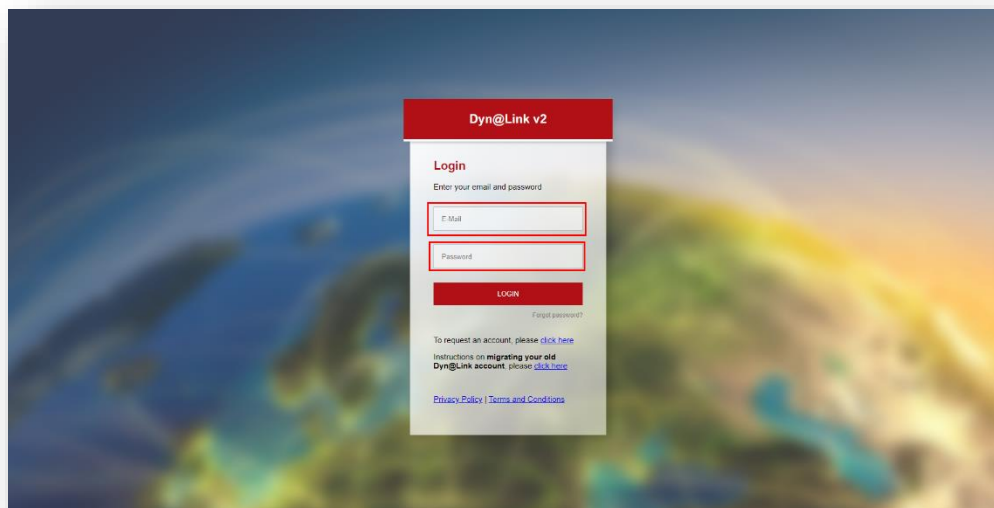




Testing process:

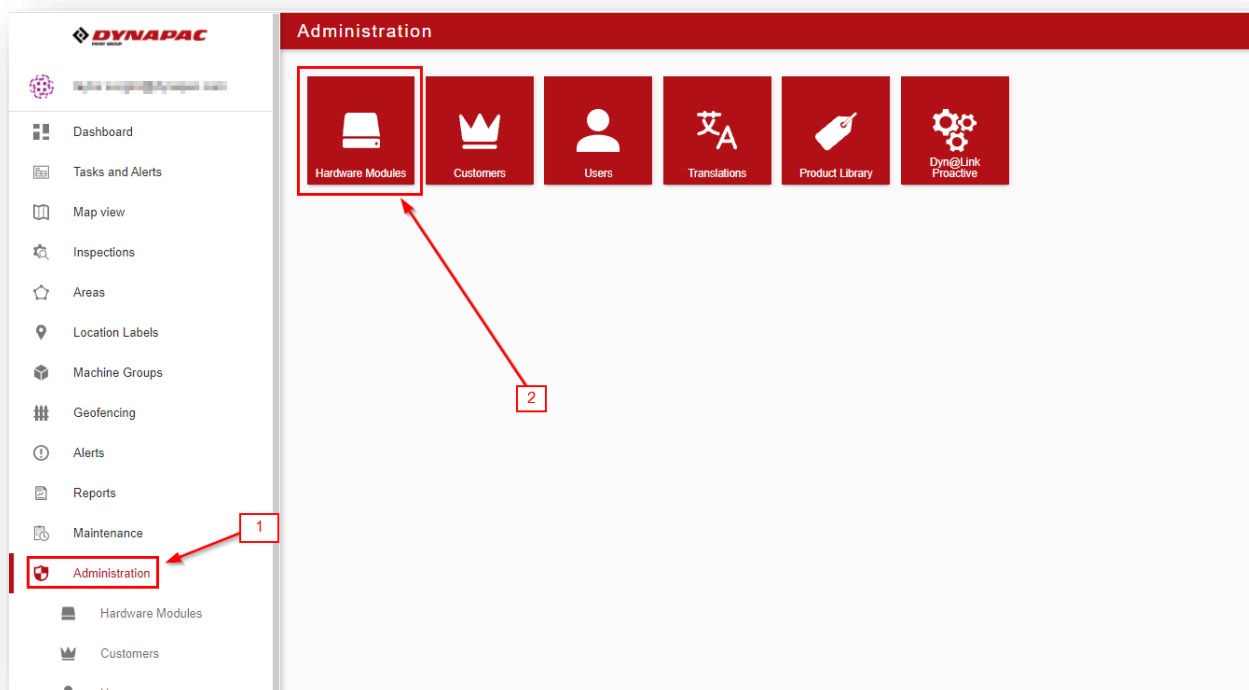
Important: Choose the right configuration. Thereafter, wait at least 10 minutes with the machine in running modus (ignition on) before checking

Log in to the Dyn@Link website: dynamlink.dynapac.com, using the appropriate user name and password.





Navigate to the Administration pane by click on the “Administration” tab on the left hand side of the screen. Then click on “Hardware Modules” Icon.



Type in the IMEI number that you are going to mount. The IMEI number can be read from the sticker on the hardware module. Once you have entered the IMEI, press the “Ok” button to search in the system for that module.





In the list of found modules, click on the module that you would like to assign to a machine.

Machine name	Serial number	Assigned to	Last updated	IMEI number	Settings CRC code	Firmware version	Active
No image	867604054931622	867604054931622	Dynapac	867604054931622			No

Enter the following information:

1. Machine name
2. Assignment (this should be your local PC)
3. Machine Serial Number
4. Machine type

Once the information is verified, click on the save button.



- Dashboard
- Tasks and Alerts
- Map view
- Inspections
- Areas
- Location Labels
- Machine Groups
- Geofencing
- Alerts
- Reports
- Maintenance
- Administration**
 - Hardware Modules
 - Customers
 - Users
 - Translations
 - Product Library
 - Dyn@Link Proactive

Hardware Module Settings

← Administration ▶ Hardware Modules ▶ 867604054931622

Hardware Module Settings: 867604054931622

Machine name
10000407TA021105

Assigned to
PC Karlskrona ▼

Current Owner:
Dynamac Global, Dynamac

Machine Details

Serial number
10000407TA021105

Machine type and model
CC5200VI ▼

Current image:
No image

Subscription

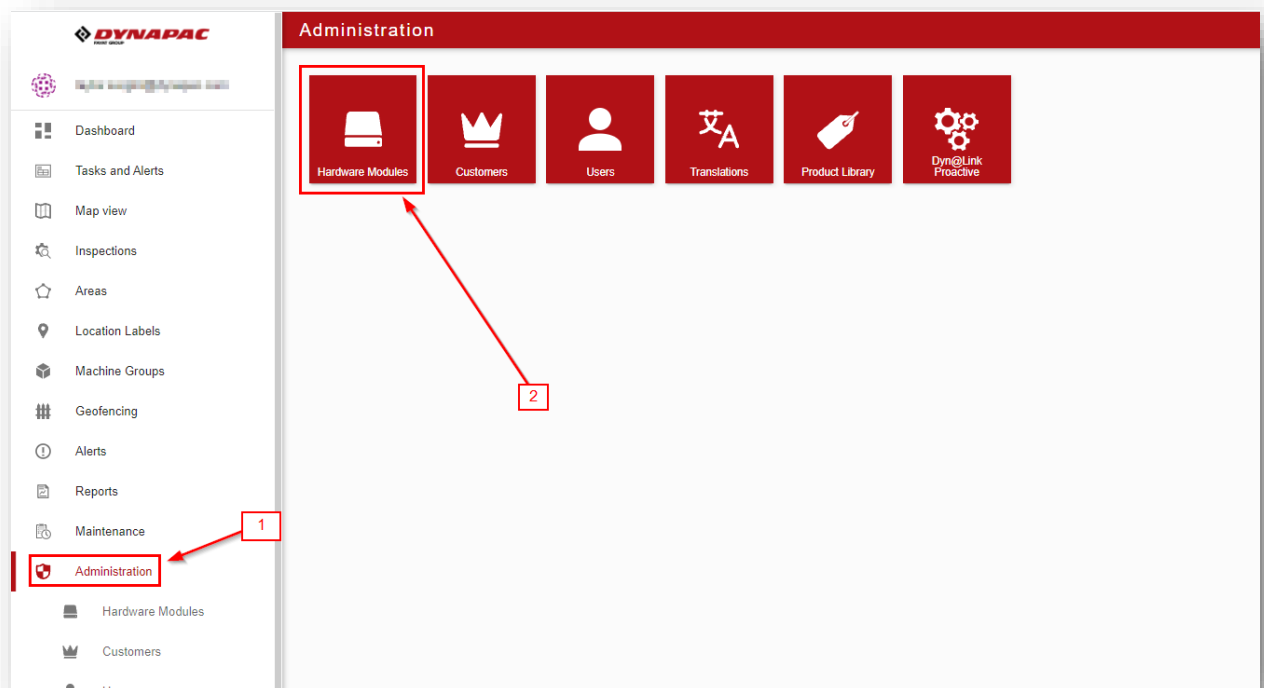
IMEI number:	867604054931622
Hardware Module Type:	FM02 (Inter-Data)
Hardware Module Capabilities:	Basic
Subscription active:	No
Activate subscription:	☐ Activate subscription

SAVE

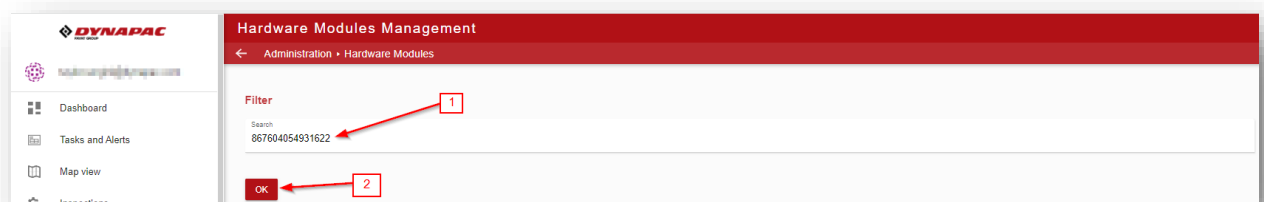


Testing

Navigate to the Administration pane by click on the “Administration” tab on the left hand side of the screen. Then click on “Hardware Modules”.



Type in the IMEI number OR machine serial number. Press the “Ok” button to search in the system for that module.





In the list of found modules, click on the module that you would like to verify.

- Dashboard
- Tasks and Alerts
- Map view
- Inspections
- Areas
- Location Labels
- Machine Groups
- Geofencing
- Alerts
- Reports
- Maintenance

Hardware Modules Management

← Administration • Hardware Modules

Filter

Search
867604054931622

OK

Hardware Modules

Machine name	Serial number	Assigned to	Last updated	IMEI number	Settings CRC code	Firmware version	Active
No image	867604054931622	867604054931622	Dynapac	867604054931622			No

Total 1 Hardware Modules found.



Verify that the Dyn@Link hardware module has a machine assigned to it and that the machine serial number are correct.

Dashboard

Tasks and Alerts

Map view

Inspections

Areas

Location Labels

Machine Groups

Geofencing

Alerts

Reports

Maintenance

Administration

Hardware Modules

Customers

Users

Translations

Product Library

Dyn@Link Proactive

Hardware Module Settings

Administration > Hardware Modules > 10000188AMA032085

Hardware Module Settings: 861861041081368

Machine name
10000188AMA032085

Assigned to
Dynapac DACH

Current Owner:
Dynapac Global, Internal Organisation, Customer Centres, Dynapac DACH

Machine Details

Serial number
10000188AMA032085

Machine type and model
CA3500D

Current image:

Subscription

IMEI number:	861861041081368
Hardware Module Type:	Manager V4 (Inter-Data)
Hardware Module Capabilities:	Advanced (CAN-bus)
Subscription active:	No
Activate subscription:	☐ Activate subscription

SAVE



Scroll down on the webpage.

Navigate to the diagnostics section by clicking on the “Diagnostics” link (near the bottom of the webpage).

DYNAPAC

Administration • Hardware Modules • 10000188AMA032085

Current image:

Subscription

IMEI number:	861861041081368
Hardware Module Type:	Manager V4 (Inter-Data)
Hardware Module Capabilities:	Advanced (CAN-bus)
Subscription active:	No
Activate subscription:	☐ Activate subscription

SAVE

Administrative functions

- Machine Detail Page
- Diagnostics**
- Unassign Hardware Module
- Run Control
- Data Wipe
- Subscription Settings



On the diagnostics page, please confirm that all rows are marked with an “Ok”.

- Dashboard
- Tasks and Alerts
- Map view
- Inspections
- Areas
- Location Labels
- Machine Groups
- Geofencing
- Alerts
- Reports

IoT Device Diagnostics

← Administration • Hardware Modules • 10000188AMA032085

Diagnostics for IoT Device 861861041081368

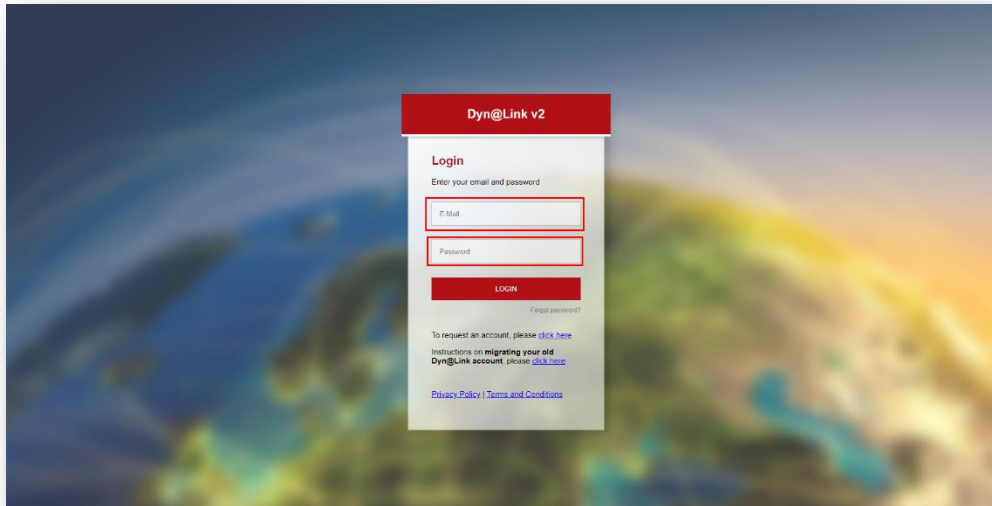
Loading diagnostics module for Inter-Data Manager V4 modules...

	Diagnostic test	Result	Additional information
OK	First data received	02 September 2021 12:49:33	
OK	Last data received	08 October 2021 09:36:03	Data received in the last 7 days
OK	Last working hours data from CAN-bus	05 October 2021 12:45:36	Data received in the last 7 days
OK	GPS last position	49.80859,N,8.48343,E	
OK	Last reported speed	0 km/h	
OK	Last powersource	External Power Supply	
OK	Last reported system voltage	25.46	

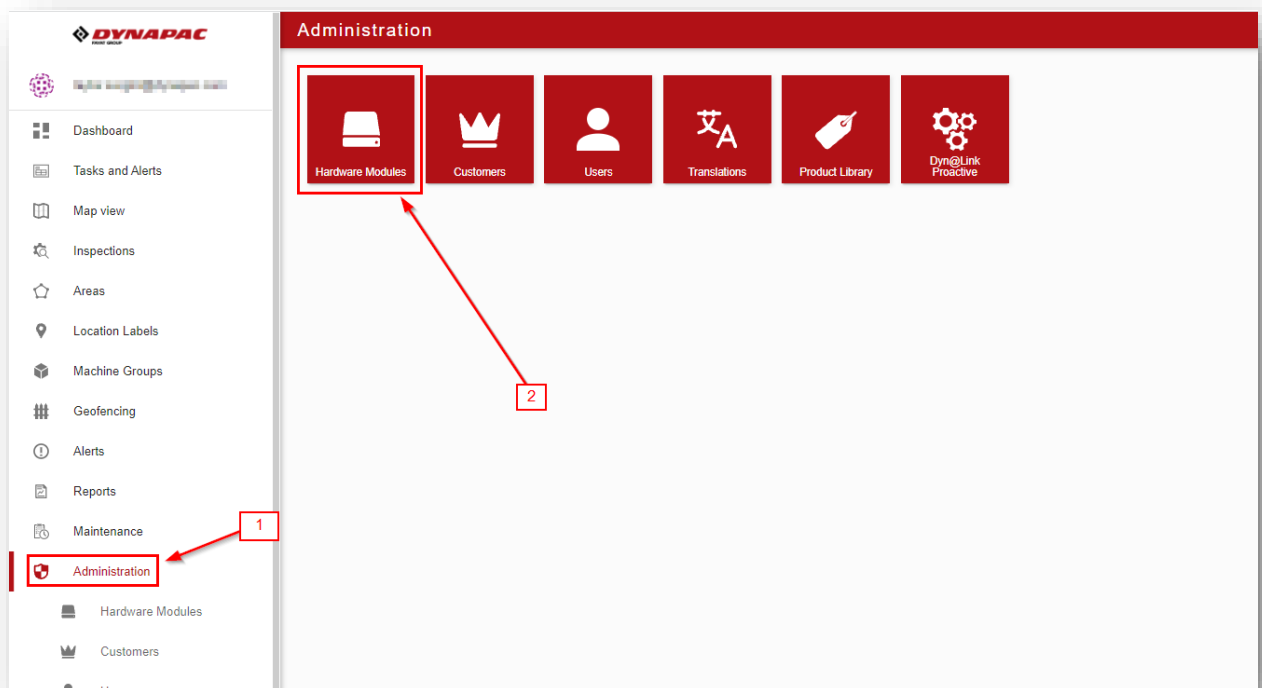


Un-assigning Module

Log in to the Dyn@Link website: dynalink.dynapac.com, using the appropriate user name and password.



Navigate to the Administration pane by click on the “Administration” tab on the left hand side of the screen. Then click on “Hardware Modules”.





Type in the IMEI number or machine serial number that you are going to unassign. Once you have entered the IMEI, press the “Ok” button to search in the system for that module.

In the list of found modules, click on the module that you would like to unassign.

Hardware Modules Management								
Administration • Hardware Modules								
Filter								
Search: 867604054931622								
OK								
Hardware Modules								
Machine name	Serial number	Assigned to	Last updated	IMEI number	Settings CRC code	Firmware version	Active	
No image	867604054931622	867604054931622	Dynapac	867604054931622				No
Total 1 Hardware Modules found.								



Scroll down on the diagnostics page and set “Assigned to” to Dynapac, then click the save button.

- Dashboard
- Tasks and Alerts
- Map view
- Inspections
- Areas
- Location Labels
- Machine Groups
- Geofencing
- Alerts
- Reports
- Maintenance
- Administration**
 - Hardware Modules
 - Customers
 - Users
 - Translations
 - Product Library
 - Dyn@Link Proactive

Hardware Module Settings

← Administration ▶ Hardware Modules ▶ 10000188AMA032085

Hardware Module Settings: 861861041081368

Machine name
10000188AMA032085

Assigned to
— Dynapac

Current Owner:
Dynapac Global, Internal Organisation, Customer Centres, Dynapac DACH

Machine Details

Serial number
10000188AMA032085

Machine type and model
CA3500D

Current image:

Subscription

IMEI number:	861861041081368
Hardware Module Type:	Manager V4 (Inter-Data)
Hardware Module Capabilities:	Advanced (CAN-bus)
Subscription active:	No
Activate subscription:	☐ Activate subscription

SAVE

2



Next click on the “Unassign Hardware Module”

DYNAPAC

Hardware Module Settings

Administration • Hardware Modules • 10000188AMA032085

Current image:

Subscription

IMEI number:	861861041081368
Hardware Module Type:	Manager V4 (Inter-Data)
Hardware Module Capabilities:	Advanced (CAN-bus)
Subscription active:	No
Activate subscription:	☐ Activate subscription

SAVE

Administrative functions

- Machine Detail Page
- Diagnostics
- Unassign Hardware Module**
- Run Control
- Data Wipe
- Subscription Settings

Confirm that you actually want



This product is manufactured by:

Inter-Data Europe B.V.
Wanraaij 4
6673DN Andelst
Netherlands

Contact person:
Mr. D.Bouwens
Tel: +31 345-522333
Info@Inter-Data.eu