



What's new
ADMA-G
ADMA-Speed
ADMA-Slim

Hardware V3.0
Firmware-Version 30.10.X.X



GeneSys Elektronik GmbH
Offenburg

What's new?

FW 30.10.x.x

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1 Introduction

The basic instructions are intended to be read in conjunction with the installation and configuration of your ADMA. The instructions are valid for all ADMA 3.0 models. Further details can be found in the respective user manual of each product.

What's new?

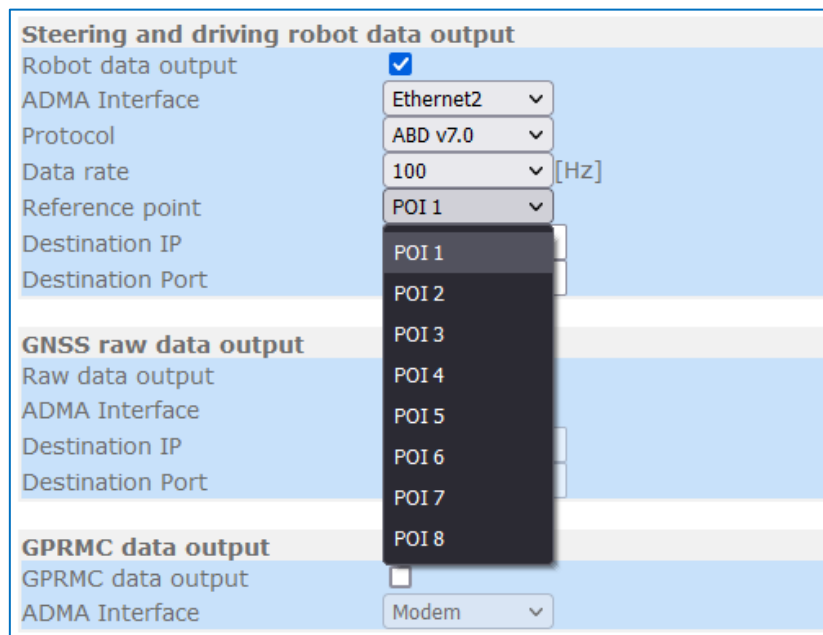
FW 30.10.x.x

Extract of changes and fixes

1.1 Feature added: Robot data reference point

What's new:

In the past, the robot data were always output with fixed reference to POI1. From now on every POI can be used as reference point for the robot data.



The screenshot shows a configuration window titled "Steering and driving robot data output". It contains three sections: "Steering and driving robot data output", "GNSS raw data output", and "GPRMC data output". The "Reference point" dropdown menu is open, showing options from POI 1 to POI 8.

Section	Parameter	Value
Steering and driving robot data output	Robot data output	<input checked="" type="checkbox"/>
	ADMA Interface	Ethernet2
	Protocol	ABD v7.0
	Data rate	100 [Hz]
	Reference point	POI 1
	Destination IP	POI 1
GNSS raw data output	Raw data output	<input type="checkbox"/>
	ADMA Interface	POI 1
	Destination IP	POI 1
	Destination Port	POI 1
GPRMC data output	GPRMC data output	<input type="checkbox"/>
	ADMA Interface	Modem

What's new?

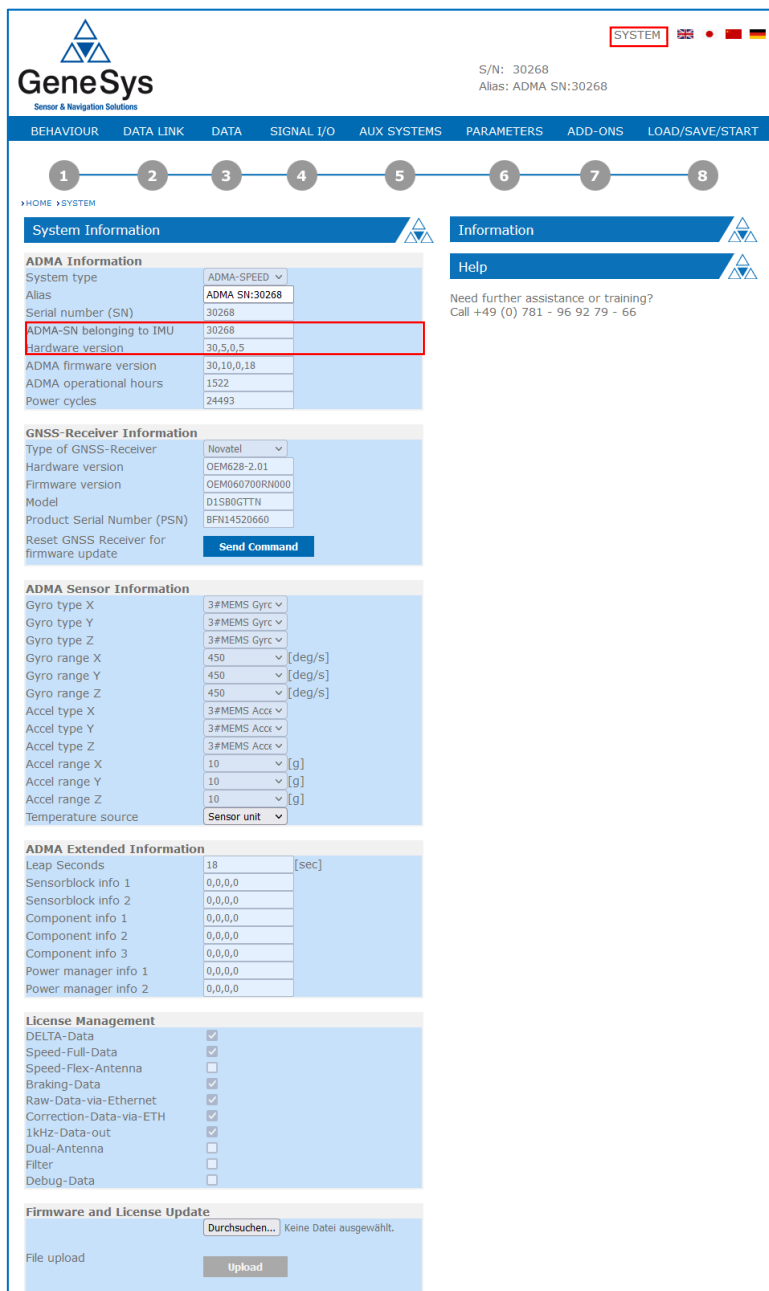
FW 30.10.x.x

1.2 Feature added: ADMA-Speed-SN coupled with connected IMU

What's new:

With a ADMA-Speed HW \geq 30.5.x.x it's now possible to calibrate and adjust the IMU on our turn table and apply the calibration data to the system measurements. For correct assignment of IMU and ADMA-Speed, the Serial Number of the ADMA coupled with the currently connected IMU is shown at **SYSTEM** in the Webinterface now. The stored calibration data in the ADMA only get applied, when the correct IMU is connected. Previous ADMA-Speed Hardware versions can be upgraded, please contact us.

Note: ADMA HW version 30.5.x.x is required for this feature.



The screenshot displays the GeneSys web interface. At the top, the 'SYSTEM' menu is highlighted. Below the navigation bar, a progress indicator shows steps 1 through 8, with step 1 being the current view. The 'System Information' section is active, showing details for the ADMA-Speed hardware. The 'ADMA Information' table lists various parameters, with the 'ADMA-SN belonging to IMU' and 'Hardware version' rows highlighted in red. The 'GNSS-Receiver Information' section shows details for a Novatel receiver. The 'ADMA Sensor Information' section lists various sensor parameters. The 'ADMA Extended Information' section shows various system information. The 'License Management' section shows a list of licenses with checkboxes. The 'Firmware and License Update' section shows a file upload button.

ADMA Information	
System type	ADMA-SPEED
Alias	ADMA SN:30268
Serial number (SN)	30268
ADMA-SN belonging to IMU	30268
Hardware version	30,5,0,5
ADMA firmware version	30,10,0,18
ADMA operational hours	1522
Power cycles	24493

GNSS-Receiver Information	
Type of GNSS-Receiver	Novatel
Hardware version	OEM628-2.01
Firmware version	OEM060700RN000
Model	D1580GTTN
Product Serial Number (PSN)	BFN14520660
Reset GNSS Receiver for firmware update	<button>Send Command</button>

ADMA Sensor Information	
Gyro type X	3#MEMS Gyro
Gyro type Y	3#MEMS Gyro
Gyro type Z	3#MEMS Gyro
Gyro range X	450 [deg/s]
Gyro range Y	450 [deg/s]
Gyro range Z	450 [deg/s]
Accel type X	3#MEMS Accel
Accel type Y	3#MEMS Accel
Accel type Z	3#MEMS Accel
Accel range X	10 [g]
Accel range Y	10 [g]
Accel range Z	10 [g]
Temperature source	Sensor unit

ADMA Extended Information	
Leap Seconds	18 [sec]
Sensorblock info 1	0,0,0,0
Sensorblock info 2	0,0,0,0
Component info 1	0,0,0,0
Component info 2	0,0,0,0
Component info 3	0,0,0,0
Power manager info 1	0,0,0,0
Power manager info 2	0,0,0,0

License Management	
DELTA-Data	<input checked="" type="checkbox"/>
Speed-Full-Data	<input checked="" type="checkbox"/>
Speed-Flex-Antenna	<input type="checkbox"/>
Braking-Data	<input checked="" type="checkbox"/>
Raw-Data-via-Ethernet	<input checked="" type="checkbox"/>
Correction-Data-via-ETH	<input checked="" type="checkbox"/>
1kHz-Data-out	<input checked="" type="checkbox"/>
Dual-Antenna	<input type="checkbox"/>
Filter	<input type="checkbox"/>
Debug-Data	<input type="checkbox"/>

Firmware and License Update	
Durchsuchen...	Keine Datei ausgewählt.
File upload	<button>Upload</button>

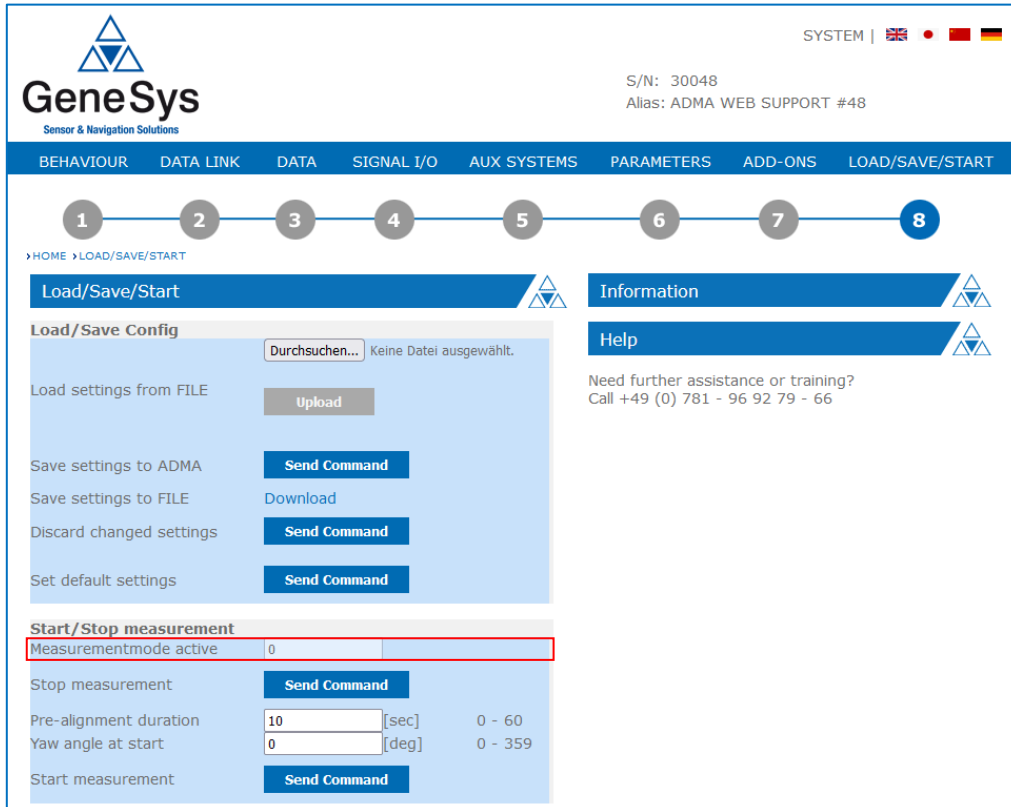
What's new?

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1.3 Feature added: Measurement mode active status

What's new:

At menu **6 Parameters** a new status **Measurement mode active** has been added. When the ADMA measurement got started and measurement data are output, Measurement mode active is 1.



The screenshot displays the GeneSys web interface. At the top, the logo and 'Sensor & Navigation Solutions' text are on the left, and 'SYSTEM |' followed by flags and 'S/N: 30048', 'Alias: ADMA WEB SUPPORT #48' are on the right. A navigation bar contains links: BEHAVIOUR, DATA LINK, DATA, SIGNAL I/O, AUX SYSTEMS, PARAMETERS, ADD-ONS, and LOAD/SAVE/START. Below this is a progress bar with 8 numbered steps. The 'LOAD/SAVE/START' menu is active, showing a breadcrumb trail: > HOME > LOAD/SAVE/START. The main content area is divided into two columns. The left column has a 'Load/Save/Start' header and a 'Load/Save Config' section with a search bar (containing 'Durchsuchen...') and the text 'Keine Datei ausgewählt.'. Below this are four rows of settings: 'Load settings from FILE' with an 'Upload' button, 'Save settings to ADMA' with a 'Send Command' button, 'Save settings to FILE' with a 'Download' button, and 'Discard changed settings' with a 'Send Command' button. The right column has an 'Information' header and a 'Help' section with the text 'Need further assistance or training? Call +49 (0) 781 - 96 92 79 - 66'. The 'Start/Stop measurement' section is highlighted with a red box and contains a table with the following data:

Start/Stop measurement		
Measurementmode active	0	
Stop measurement	<button>Send Command</button>	
Pre-alignment duration	<input type="text" value="10"/> [sec]	0 - 60
Yaw angle at start	<input type="text" value="0"/> [deg]	0 - 359
Start measurement	<button>Send Command</button>	

What's new?

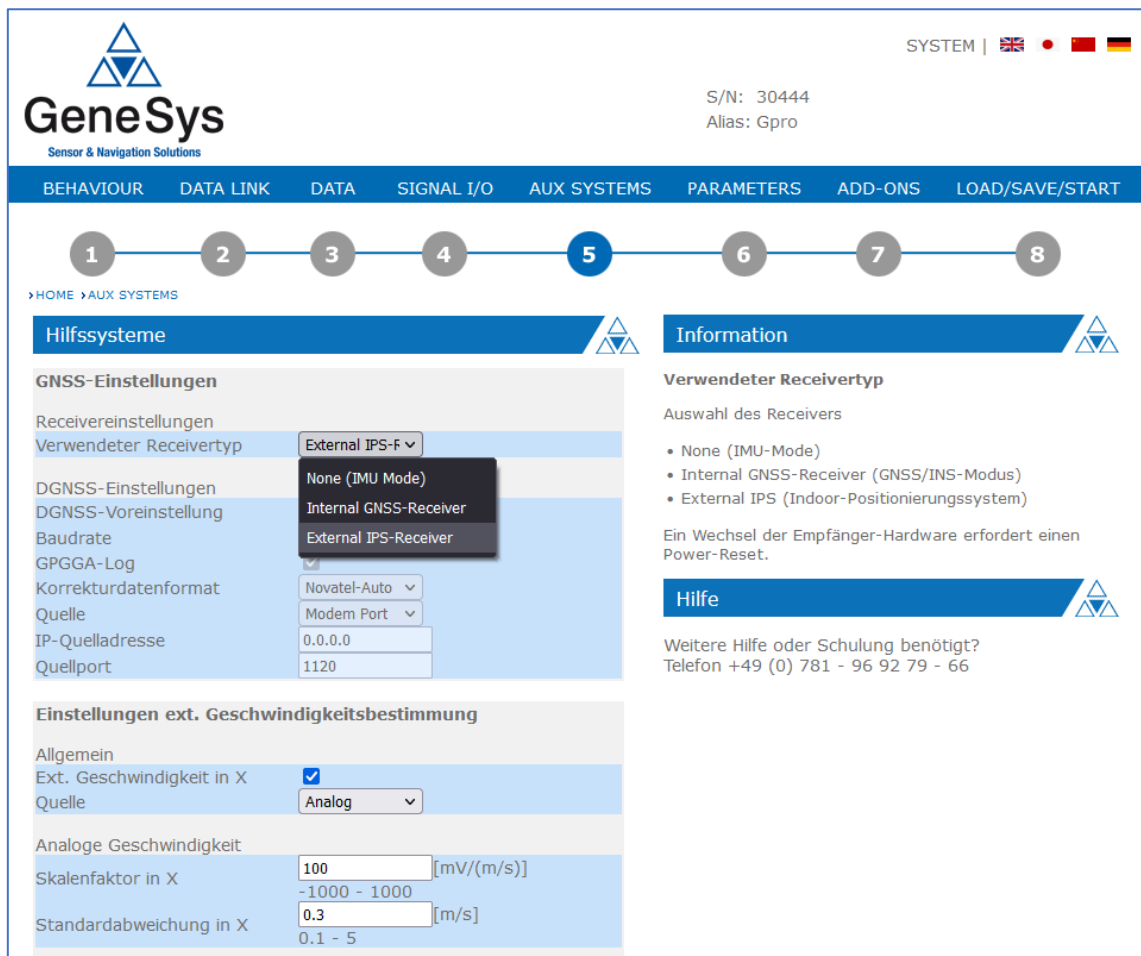
FW 30.10.x.x





1.4 Feature added: Full IPS Integration

What's new:

The new Indoor Positioning System (IPS) got fully integrated into the ADMA-G. Instead of using the internal GNSS-Receiver it is possible to configure IPS as Receiver Type. Previous ADMA-G Hardware Versions can be upgraded for using the IPS.

Note: Minimum ADMA Hardware version 30.4.0.0 is required for the usage of IPS.



SYSTEM |    

S/N: 30444
Alias: Gpro

BEHAVIOUR DATA LINK DATA SIGNAL I/O **AUX SYSTEMS** PARAMETERS ADD-ONS LOAD/SAVE/START

1 2 3 4 **5** 6 7 8

HOME > AUX SYSTEMS

Hilfssysteme

GNSS-Einstellungen

Receiver-Einstellungen

Verwendeter Receivertyp **External IPS-F**

- None (IMU Mode)
- Internal GNSS-Receiver
- External IPS-Receiver

DGNSS-Einstellungen

DGNSS-Voreinstellung

Baudrate

GPGGA-Log

Korrekturdatenformat **Novatel-Auto**

Quelle **Modem Port**

IP-Quelladresse **0.0.0.0**

Quellport **1120**

Einstellungen ext. Geschwindigkeitsbestimmung

Allgemein

Ext. Geschwindigkeit in X ☒

Quelle **Analog**

Analoge Geschwindigkeit

Skalenfaktor in X **100** [mV/(m/s)]

-1000 - 1000

Standardabweichung in X **0.3** [m/s]

0.1 - 5

Information

Verwendeter Receivertyp

Auswahl des Receivers

- None (IMU-Mode)
- Internal GNSS-Receiver (GNSS/INS-Modus)
- External IPS (Indoor-Positionierungssystem)

Ein Wechsel der Empfänger-Hardware erfordert einen Power-Reset.

Hilfe

Weitere Hilfe oder Schulung benötigt?
Telefon +49 (0) 781 - 96 92 79 - 66


What's new?

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1.5 Feature added: Application type


It is now possible to set a specific VRU-Backpack mode. When configured, the Heading (INS_Yaw) is no longer locked in standstill.

Parameters



System Parameters			
System behaviour relevant parameters			
Min. velocity for AutoInit	<input type="text" value="3"/>	[m/s]	1 - 7
Min. velocity for heading ctrl.	<input type="text" value="5"/>	[m/s]	1 - 7
Use Dual Antenna	<input type="text" value="Off"/>		
Application	<input type="text" value="Vehicle"/>		
Standstill detection	<input type="text" value="Vehicle"/>		
Max. rate at standstill	<input type="text" value="VRU-Backpack"/>	[0.1*deg/s]	1 - 20
Max. velocity at standstill	<input type="text" value="20"/>	[0.01*m/s]	1 - 30
Auto determine Max. rate ?	<input type="button" value="Send Command"/>		

Information




Application

Please select in which type of application the device used in?


Available options:

- Vehicle: Standard setting for the use of the ADMA in vehicles application.
- VRU-Backpack: For the use of an ADMA in the VRU-Backpack application.

Help



Technical Support Center & Firmware Notification



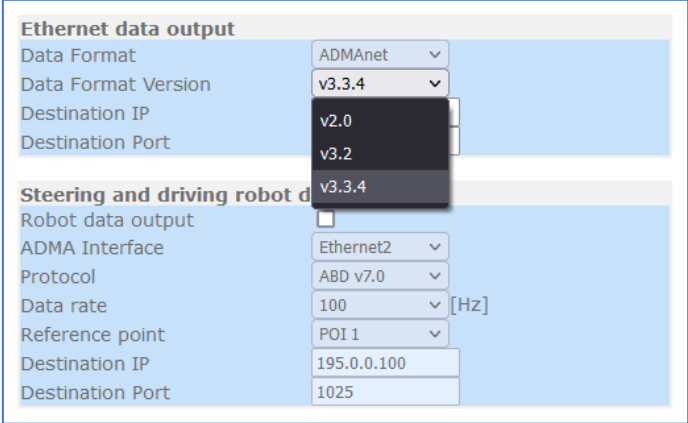
What's new?

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1.6 Feature updated: ADMAnet dataformat v3.3.4

What's new:

The ADMAnet data format v3.3.3 has been updated to v3.3.4. These changes contain only added internal status information. The new data format is [completely backwards compatible](#).



The screenshot displays a configuration window with two main sections: "Ethernet data output" and "Steering and driving robot d".

Ethernet data output

Data Format	ADMAnet
Data Format Version	v3.3.4
Destination IP	
Destination Port	

Steering and driving robot d

Robot data output	<input type="checkbox"/>
ADMA Interface	Ethernet2
Protocol	ABD v7.0
Data rate	100 [Hz]
Reference point	POI 1
Destination IP	195.0.0.100
Destination Port	1025

A dropdown menu is open for the "Data Format Version" field, showing the following options: v2.0, v3.2, and v3.3.4. The "v3.3.4" option is currently selected.

What's new?

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1.7 Feature updated: ADMA License Management visualization

The visualization of the License Management in the ADMA Webinterface got a new look. Now it is possible to see if the license is temporary, permanent or not available.

License Management		
DELTA-Data	<input checked="" type="checkbox"/>	Permanent
Multi-CAN	<input checked="" type="checkbox"/>	Permanent
Braking-Data	<input checked="" type="checkbox"/>	Permanent
Raw-Data-via-Ethernet	<input checked="" type="checkbox"/>	Permanent
Correction-Data-via-ETH	<input checked="" type="checkbox"/>	Permanent
1kHz-Data-out	<input checked="" type="checkbox"/>	20220420
Dual-Antenna	<input checked="" type="checkbox"/>	Permanent
Filter	<input checked="" type="checkbox"/>	N/A
ACOM-Data	<input checked="" type="checkbox"/>	Permanent
Debug-Data	<input checked="" type="checkbox"/>	Permanent

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2 Support

Technical Support Center

<https://genesys-offenburg.de/support-center/>

Headquarter

GeneSys Elektronik GmbH
In der Spöck 10
77656 Offenburg - Germany

www.genesys-offenburg.de
www.genesys-adma.de

Phone: +49 (0) 7 81 / 96 92 79- 66
Fax: +49 (0) 7 81 / 96 92 79- 11
Email: support@genesys-offenburg.de