



# COMMUNICATION INTERFACES

COMPLETE CONTROL FOR PUMPS AND PUMP SYSTEMS

## THE CIM/CIU CONCEPT

For complete control of pump systems, the Grundfos fieldbus concept is the right solution. The innovative Communication Interface Module (CIM) and the Communication Interface Unit (CIU) enable data communication via open and interoperable networks such as Profibus DP, Modbus RTU, LONWorks, BACnet MS/TP®, PROFINET IO, Modbus TCP, GSM/GPRS (wireless), or using Grundfos Remote Management.

The series of Grundfos CIM/CIU communication interfaces offer ease of installation and commissioning, user-friendliness and great value for money in the long term. All modules are based on standard functional profiles for an easy integration into the network and easy understanding of data points.

### When to use CIM and CIU

CIM modules are add-on modules that allow communication with 11 to 22 kW E-pumps and E-Pumps with MGE model H, Dedicated Controls, MAGNA3, CU352 Hydro MPC and the CU323 Hydro Multi-B.

The CIU communication interface unit is for products with a GENIbus interface such as medium-sized E-pumps, circulation pumps and Hydro Multi-E. CIU units have an integrated 24 to 240 V power supply and are prepared for wall-mounting or DIN-rail mounting.



## THE IDEAL SOLUTION

The Grundfos CIM/CIU communication interfaces enable the connection of Grundfos products to standard fieldbus networks, offering substantial benefits:

- Complete process control
- One concept for Grundfos products
- Modular design – prepared for future needs
- Based on standard functional profiles
- 24-240 VAC/DC power supply in CIU modules
- Simple configuration and easy to install
- Open communication standards

### Integration CD for fast commissioning

With every CIM/CIU communication interface module, Grundfos gives you an integration CD that ensures easy integration into supervisory systems and fast commissioning. You are provided with functional profiles, documentation and installation files, ready to use.

The CIM/CIU PC Tool with support for Modbus RTU, GENIbus, Profibus DP, Modbus TCP, PROFINET IO, LON, BACnet MS/TP are included for easy integration into SCADA systems.

Your Grundfos CIU/CIM communication interface solution can be connected to any SCADA, PLC or Building Management System for communication using the applicable open protocols for wired and wireless communication.



## WHY GRUNDFOS CIM/CIU MODULES MAKE GOOD SENSE

Open and interoperable data bus networks are becoming increasingly important for supervisory systems monitoring pump systems, and Grundfos is committed to open protocols. You gain an optimal, flexible and therefore cost-effective integration of data communication and field devices such as pumps or pump systems into management systems.

Taking complete control of your pump system in this way offers many advantages. The time spent on reporting, data collection, and so on is minimised – as are service visits. When you always know how your pumps are doing, maintenance visits can be scheduled for maximum efficiency – and emergencies reduced to the barest minimum.



## CIM/CIU COMMUNICATION INTERFACE PRODUCTS

Supports a wide range of Grundfos products, for detailed information see the table below:

- > CIM 050 for GENIbus
- > CIM 100/110 and CIU 100/110 for LONWorks networks
- > CIM/CIU 150 / CIU 152 and E-box 150 for Profibus DP
- > CIM/CIU 200 / CIU 202 and E-box 200 for Modbus RTU / COMLI
- > CIM/CIU 250 / CIU 251 / CIU 252 for GSM/GPRS networks
- > CIM 270 / CIU 270-273 for GRM
- > CIM/CIU 300 for BACnet MS/TP networks
- > CIM/CIU 500 for PROFINET IO & Modbus TCP networks

	MAGNA */ UPE 80-120/100-120	MAGNA 3	0.25 - 7.5 kW 2) E-pumps	11-22kW 0.25-3.0 kW 2) E-pump	CUE	CU 352 (MPC)	Multi-E	MP 204	Dedicated Controls	Sewage AUTOADAPT	Hydro Multi-B	DDA dosing	CR Monitor*	RCME Rainwater Control
GENIbus	UPE: built in MAGNA: add on	CIM 050	built in	built in (CIM 50)	built in	CIM 050	built in	built in	CIM 050	CIM 050 + CIU 902	CIM 050	built in		
LON	CIU 100	CIM 100	CIU 100	CIM 100	CIU 100	CIM 110	CIU 100				CIU 110			
Profibus DP	CIU 150	CIM 150	CIU 150	CIM 150	CIU 150	CIM 150	CIU 150	CIU 150	CIM 150	CIU 152		CIU 150 / E-Box 150	CIU 150	
PROFINET IO	CIU 500	CIM 500	CIU 500	CIM 500	CIU 500	CIM 500	CIU 500	CIU 500	CIM 500	CIM 500 + CIU 902		CIU 500	CIU 500	
Modbus TCP	CIU 500	CIM 500	CIU 500	CIM 500	CIU 500	CIM 500	CIU 500	CIU 500	CIM 500	CIM 500 + CIU 902		CIU 500	CIU 500	
Modbus RTU / COMLI	CIU 200	CIM 200	CIU 200	CIM 200	CIU 200	CIM 200	CIU 200	CIU 200	CIM 200	CIU 202	CIM 200	CIU 200 / E-Box 200	CIU 200	
GSM/GPRS/SMS (e.g. for SCADA)	CIU 250	CIM 250	CIU 250	CIM 250	CIU 250	CIM 250	CIU 250	CIU 250	CIM 250	CIU 252	CIM 250		CIU 250	
BACnet MS/TP	CIU 300	CIM 300	CIU 300	CIM 300	CIU 300	CIM 300	CIU 300				CIM 300			
GRM (Grundfos Remote Management)	CIU 271	CIM 270	CIU 271	CIM 270	CIU 271	CIM 270	CIU 271	CIU 271	CIM 270	CIU 272	CIM 270	CIU 271	CIU 271	CIM 270

11-22 kW TPED twinpumps 3,0 -22 kW requires always 2 CIU modules

For more detailed information, see the CIM/CIU communication interface leaflets.

\* GENIbus module required

CIU 251 (with additional IO board) can be used as alternative in all application cases of CIU 250

2) E-pumps with MGE model H requires CIM interfaces

## SEE THE BIGGER PICTURE

Grundfos is a global leader within water handling technology. Our passion is to bring you all the products you require to create and operate pump systems that combine reliability, cost-efficiency – and innovation. Our products are for use in water supply and wastewater infrastructure on any scale.

Grundfos has a full line of products and systems for the intake, treatment, and distribution of drinking water and for the transport and treatment of wastewater. We also offer expertise and industry insight that can increase reliability and reduce lifecycle costs for water utilities.

Key product areas include:

-  Submersible pumps
-  Surface pumps
-  Sewage pumps
-  Mixers, flowmakers & recirculation pumps
-  Pumping stations
-  Monitoring & controls
-  Dosing & disinfection
-  Aeration equipment

Further details about Grundfos communication interfaces and Remote Management are available on request – contact your local Grundfos office or representative.

Our products are the result of decades of engineering expertise. Supported by a worldwide service network. Visit [www.grundfos.com](http://www.grundfos.com) for more.