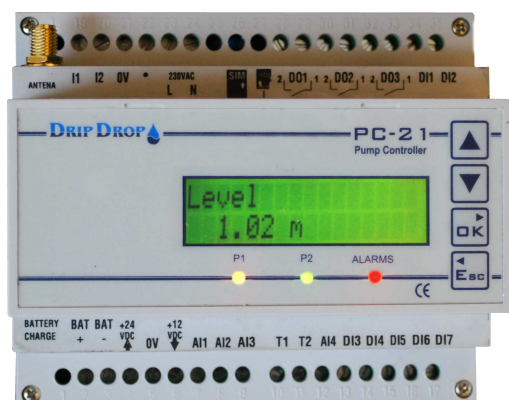


# PC-21

## Pump controller, Alarm relay & Logger with built-in GSM/GPRS modem



**PC-21** user-friendly and powerful unit suitable for your water and waste water applications.

Settings are easily made directly through the traditional menu navigation similar to a regular cell phone, so no computer is needed.

PC-21 is supposed to be used to pumping stations or stations where you want to control pumps, log values, or maybe just for alarm monitoring with SMS alerts.

With the built-in RS232 port and the integrated GSM/GPRS modem the unit is able to communicate to different kinds of SCADA systems via RADIO, PSTN, 3G, GSM or GPRS

With the built-in modem, communication can be done via GPRS while the SMS alerts can be sent and received from a completely regular mobile phone, known as multi-function mode.

**The cross reference register** contained in the device makes it easy to connect the PC-21 to the various SCADA systems on the market.

Communication protocol: COMLI and MODBUS RTU/TCP.

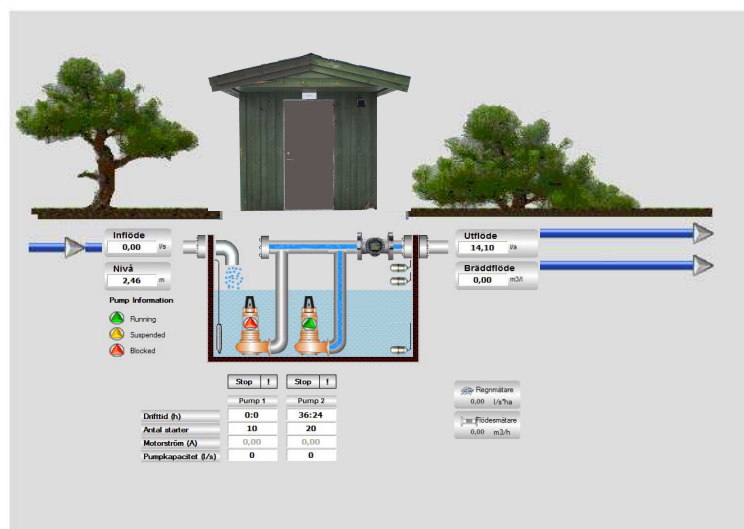
With our software PC-COM you can easily via remote connection configure the PC-21, create your own specific register cross-reference for communication with your SCADA system.

PC-COM is also a user-friendly tool for obtaining a quick status overview of your application process with a simplified schematic signal- and process image.

### Applications:

- **Pumping stations**  
controlling and monitoring the operation of pumps.
- **Measuring stations**  
measurement and logging of flow, pressure/level etc.
- **Overflow stations and manholes**  
detection, measurement, alarm and logging.
- **Rivers and Lakes**  
level monitoring, signal logging and alarm detection.
- **Water towers and booster stations**  
pressure monitoring, logging and alarm detection.

Controlling and monitoring of your pumping station.



Status & alarm via SMS to your cell phone.



Further information, welcome to contact us!

## Functions

- Monitoring, control and data logging for up to 2 pumps.
- Pumps controlled via analogue sensor and/ or level float.
- Alternation function for the pumps.
- Slurp function for cleaning of the pump sump.
- Start- and running time counters for the pumps.
- Special built-in function for mixing or flushing in the sump.
- Detection of over flow, motor protection, high level float etc.
- Alarm sending via SMS text and SMS alarm confirmation.
- Pulse counters for energy, flow and rain etc.
- Current inputs for measuring of motor/pump currents
- Built-in battery charger 230VAC/12DC for battery backup.
- Logging capacity for 1-7 days.
- SCADA support for data collection from straight register stack or from ring register stack.
- Cross-reference table to simplify communication with the most common SCADA systems for water & wastewater applications.
- Built-in GSM/GPRS modem for remote connection and SMS.
- RS232 port for computer connection or for connection to other external units such as Radio modem, GSM modem analogue telephone modem or 3G modem etc.
- GSM/SMS function for the built-in modem or for other external GSM modems.

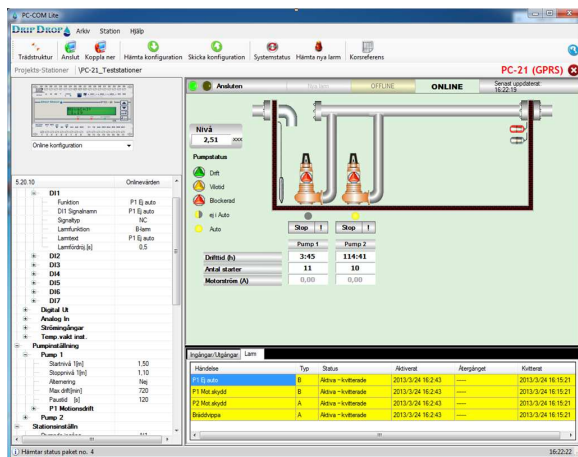
## Technical specification

Power supply	230VAC/50Hz/0.02A (+/-10%) 24VDC/0.18A (18-36VDC) 12VDC/0.275A (10.4-18VDC)
Power consumption	4.5VA
Mounting	DIN35 rail
Dimension	105 x 90 x 70mm (B x H x D)
Weight	0.20 kg
Temperature range	-20 till +50 °C
Housing	IP20
Display	2 x 16 characters
Indication LED's	3 multi colour (green, red, orange)
Digital Inputs (DI1-4)	(4)12VDC
Digital Input (DI7)	(1)12VDC
Digital Input/Pulse (DI5)	(1)12VDC (max. frequency 500 Hz)
Digital Input/Pulse (DI6)	(1)12VDC (max. frequency 10 Hz)
Current Inputs (I1-2)	(2) max 5A (For motor currents)
Analogue Inputs (AI1-2)	(2) 0/4-20mA/12VDC (10 bits)
Analogue Inputs (AI3-4)	(2) 0/4-20mA/12VDC (16 bits)
Temp. Inputs (T1-2)	(2) 12VDC (Pump Temp. protection)
Digital Outputs (DO1-3)	(3) Relays max.6A, 250VAC/30VDC)
RS232 (1)	(1) RJ45 port, max.115200 Baud
Communication protocol	COMLI and MODBUS RTU/TCP

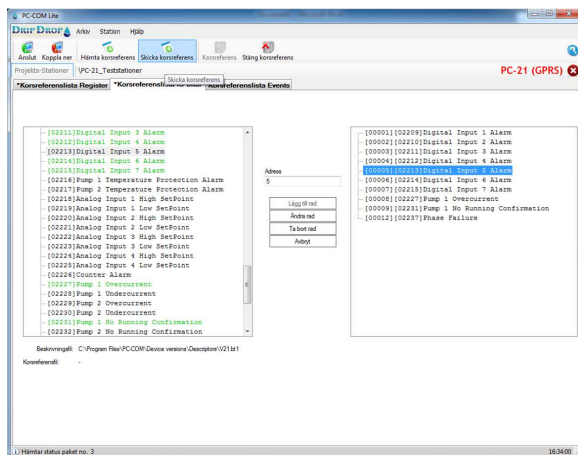
## Works with following SCADA system:

Citect, iFIX and all other SCADA systems that have support for the protocol MODBUS.

## Communication / Configuration with PC-COM



## Create your own specific cross-reference table



## Communication Interface

### PC-COM configuration



### SCADA systems MODBUS / COMLI



### SMS alarm



### Operator GSM/GPRS



### PC-21 connected to external modems: Radio, PSTN, GSM, 3G



**A small and powerful pump controller with built-in GSM/GPRS-modem**

Preliminary!

ver. 1307-1

**DRIP DROP**

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