



## IM145

### IoT Indicator

Easy to install signaling light built for remote areas. Single pump monitoring with NB-IoT and LTE-M connectivity for sewage applications.

Remote monitoring and smart warning



## Applications

Remote pumping stations in sewage applications | Monitoring of blowers and compressors

## Electrical Properties

### Power Supply

Operating voltage  
24VDC +/- 20%  
24VAC +/- 20%  
Maximum Voltage  
42 V dc, 30 V ac RMS  
Power Consumption  
0,5 W typical (2,5 W max.)

### General

Wireless connectivity  
NB-IoT/LTE-M  
Supported cellular bands  
all European bands  
MicroSIM  
10 year connectivity/500 MB  
Certification  
CE, RED, RoHS

### Digital I/O

Digital inputs  
Pump running  
Pump Thermal protection  
High water level  
Digital output  
Pump reset  
Cable specs  
6-wire pigtail (1.5 m)

### Digital I/O Characteristics

Maximum input rating  
40 VDC | 30 VAC RMS  
Max. input logic low threshold  
5.0 V (IEC 61131-2 type 1)  
Min. input logic high threshold  
15.0 V (IEC 61131-2 type 1)  
Input logic high input current  
2.2 mA typical  
Digital output type  
Open drain  
Digital output drive current  
150 mA (internally fused)

### Mechanical Specifications

Dimensions  
Overall diameter: 90mm  
Height: 55mm  
Cable hole: 10 mm (@center)  
Bolt circle: 4x M4 (@77mm PCD)  
Weight  
235 gr  
Ingress protection  
IP65

### Operating Conditions

Operating temperature  
-20 °C ... +50 °C  
Storage temperature  
-40 °C ... +70 °C  
Relative humidity  
10 % ... 95 %

## Software

### Data Collection/Recording

- Pump running including start/stop time
- Daily pump totals (runtime + switches)
- Pump totals since installation
- Pump status (on/off/standby/failure)
- High water floater status (active / not active)

### Remote Settings/Commands

- Counter reset pump runtime
- Counter reset pump switches
- Pump reset

### Alarms

- Power failure / High water (floater)
- Thermal fault Pump
- High water and no pump running
- Connection failure
- No data received during last 24h