

# COMMUNICATION

Landis+Gyr

## CU-P30, P31, P32

### TECHNICAL DATA



#### Designs

Type Survey				
Type	GSM/GPRS Modem	RS232	RS485	CS+
CU-P30	●			
CU-P31	●	●		●
CU-P32	●		●	●

#### Supported Communication Protocols

- IEC 62056-21 and *dlms*
- TCP/IP
- IPT (according to DIN 43863)

#### Fitting

directly in meter (ZxD300/400xT or ZxQ)  
in CU adapter CU-ADP1 (for other meters)

#### Power Consumption

Maximum Active/Apparent Power 3.0 W/5.5 VA

#### GSM/GPRS Modem

Operating Modes GSM or GPRS

GSM operation

- standard ETS 300 607-1/EN 301 419-1
- approvals GSM Phase 2/2+, R&TTE, GCF, CE

GPRS operation

- standard GSM 03.60, Vers. 7.8.0 (GPRS)
- GPRS class 4 (recommended), 10 (maximum)

#### Functions

time window and time master functions  
SMS-forwarding of alarm messages  
(only if fitted in meter)  
modem initializing and data flow control  
automatic modem reset  
communication monitoring

#### GSM/GPRS Module

type Siemens Cellular Engine MC39i  
frequency bands dual band EGSM900 and GSM1800  
output power  
- 2 W/class 4 at EGSM900  
- 1 W/class 1 at GSM1800

#### SIM Card

SIM 1.8/3 V exchangeable from outside

#### CS Interface

Only present on Types CU-P31 and CU-P32

serial, bi-directional current interface  
active or passive

standard IEC 62056-21/DIN 66258  
maximum number of slaves 4  
maximum transmission rate 19'200 bps  
maximum line length 3 m

#### RS232 Interface

Only present on Type CU-P31

asymmetric, serial, asynchronous, bi-directional  
interface (3-wire design)  
standard EIA RS232-C/CCITT V.24  
maximum transmission rate 57'600 bps  
maximum line length 15 m

## RS485 Interface

Only present on Type CU-P32

asymmetric, serial, asynchr., bi-directional interface  
(master or slave depending on parameterization)

standard ISO-8482  
 maximum number of slaves 31  
 maximum transmission rate 57'600 bps  
 max. line length

- up to 250 m at max. 57'600 bps, max. 31 Slaves
- up to 550 m at max. 38'400 bps, max. 31 Slaves
- up to 1000 m at max. 19'200 bps, max. 15 Slaves

## Displays

LED Displays TX, RX, CON

number of base stations receivable and field strength level (for GSM and GPRS operation)  
 connection and data flow

## Environmental Influences

In General same as for base meter  
 exception: temperature range -20 °C to +55 °C

## Insulation Strength to Meter

Insulation Strength 4 kV at 50 Hz for 1 min  
 insulation spacing at least 6.3 mm

## Weight and Dimensions

Weight approx. 100 g

Width / Height / Depth 65 / 103 / 38 mm

## Connections

Connection to Meter or CU Adapter  
 10-pin connector at rear of CU

External 5 V Power Supply (only for ZxD)

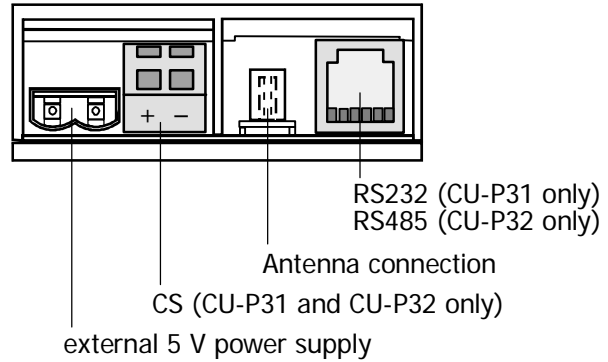
2-pin connector; recommended in the following cases for a reliable modem operation:

- meter is connected to less than three phases
- supply voltage phase – phase < 173 V
- supply voltage phase – neutral < 100 V
- meter with auxiliary power supply

CS Interface screwless spring-type terminals

Antenna Connection MCX socket  
 tear-off strength < 390 N

## Terminal Layout



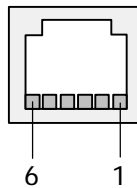
## RS232 or RS485 Interface

## RJ12 socket

Pin allocation:

RS232:  
 1 not used  
 2 TxD  
 3 GND  
 4 not used  
 5 RxD  
 6 not used

RS485:  
 1 GND  
 2 UP (Data a)  
 3 UN (Data b)  
 4 UN (Data b)  
 5 UP (Data a)  
 6 GND

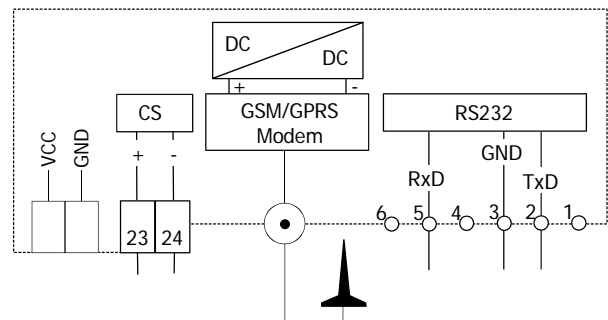


## Material

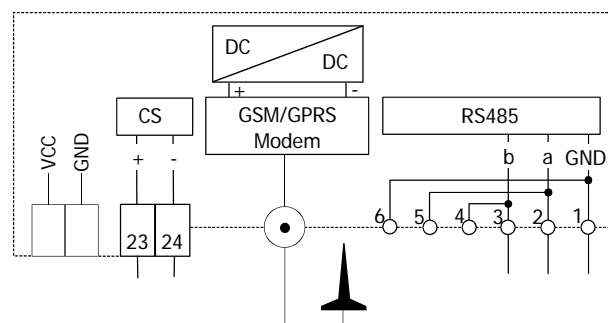
Case polycarbonate

## Connection Diagram

### Example CU-P31



### Example CU-P32



Subject to change without notice.

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