

COMMUNICATION

Landis+Gyr

CU-P20 / P21 / P22

TECHNICAL DATA



Designs

Type survey				
Type	GSM/GPRS Modem	RS232	RS485	CS+
CU-P20	●			
CU-P21	●	●		●
CU-P22	●		●	●

Supported Communication Protocols

IEC 62056-21 and *dlms*

TCP/IP

Fitting

direct in meter (ZxD300/400xT or ZxO)

in CU adapter CU-ADP1 (for other meters)

Power Consumption

Max. 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&TFTE, GCF

GPRS operation

- standard GSM 03.60, Vers. 7.8.0 (GPRS)
- class GPRS class 8 (85.6 kbps)

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 MC35i

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-P21 and CU-P22

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-P21

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-P22

asymmetric, serial, asynchronous, 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 depending on environment / cable
 - 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 (only for GSM 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 2-pin connector

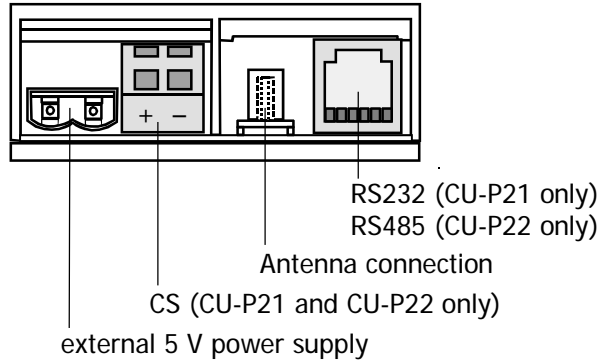
only required in the following cases:

- mains voltage at meter 3-phase < 58 V
- mains voltage at meter 1-phase < 100 V
- meter with supplementary power supply (ZxD only)

CS Interface screwless spring-type terminals

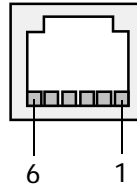
Antenna Connection MCX socket
 tear-off strength < 390 N

Terminal Layout



RS232 or RS485 Interface

Pin allocation:	RS232:	RS485:
	1 not used	1 GND
	2 TxD	2 UP (Data a)
	3 GND	3 UN (Data b)
	4 not used	4 UN (Data b)
	5 RxD	5 UP (Data a)
	6 not used	6 GND

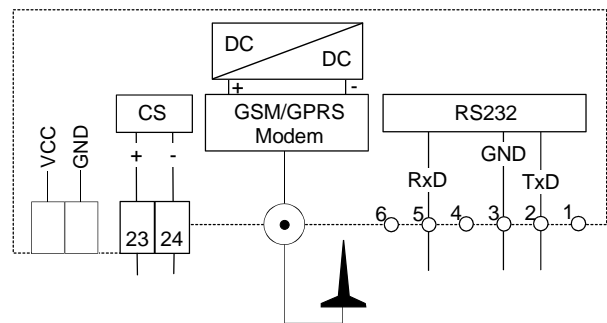


Material

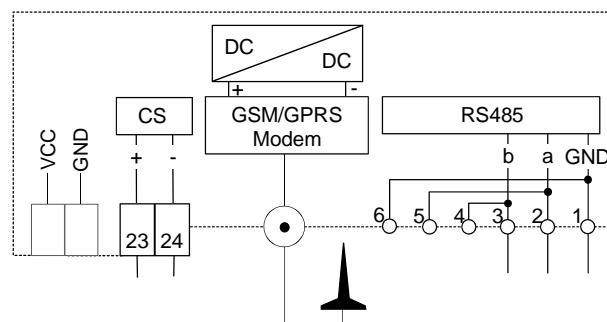
Case polycarbonate

Connection Diagram

Example CU-P21



Example CU-P22



subject to technical changes

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