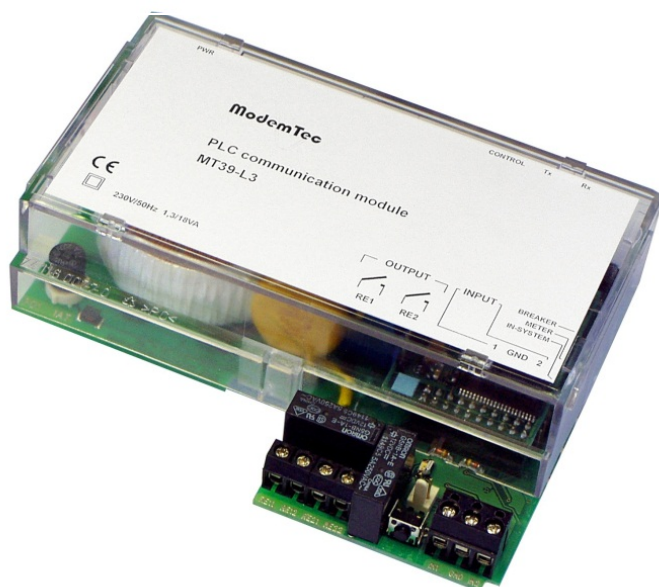


# DATASHEET

## PLC Communication Module

### MT39-Lx



#### Basic Characteristics

Internal module MT39-Lx is intelligent interface between Landis+Gyr e-meter ZxF type and data concentrator MT34-A via PLC Communication.

Modules of MT39Lx family can operate in both, single and three-phased L+G e-meters.

Module read values of electricity consumption, voltages by single phases, switches tariff groups in compliance with TOU or switches them according to orders from head-end system, and watches events (i.e. terminal cover removing, voltage flickers)

Module can switch on/off other appliances according to tariff's group or orders from head-end system. Read data are stored into flash memory with time stamp.

## Technical Data

#### Power Supply and Consumption

Power supply MT39-L1	230 V +10% -20%
MT39-L3	3x230V +10% -20%
Frequency	48-60Hz
Consumption	max 1,8W/15W reception/transmission

#### RTC Clock

Time Stability	± 1 minute/month
Battery Backup	NiCd 3V

#### PLC communication

Standard	CENELEC 50065-1
Carrier frequency	60kHz ± 145 kHz
Modulation	D-BPSK
Carrier amplitude MT39-L1	134dB/μV as per EN 50065
MT39-L3	128dB/μV as per EN 50065
Min. S/N ratio	9dB
Reception sensitivity	1mV
Transmission rate	10kBd

#### Input binary interface

Number of binary inputs	2
Max. input voltage	100V DC
Active state	> 4V DC, or disconnected
Non active input	< 0,5 V DC, or short circuit
Input impedance	100 kΩ
Screwing terminal board	3-pin

#### Output binary interface

Number of potential less relays	2
Max. voltage	250V AC, 30V DC
Max. switched current	3A
	3A, 125V AC; 3A, 30V DC for cosφ=1
Life time electrical	in 2x10 <sup>5</sup> of switching on
Life time mechanical	min 5x10 <sup>6</sup> switching on
Screwing terminal board	4-pin, 2.5mm <sup>2</sup>

#### Disconnection switch control

Output	bipolar
Output voltage	12V DC
Max. output current:	200mA
Connector	2-pin with a key

#### Indication

Indication	Led, transparent
Indication states	PWR, CONTROL, RX-PLC, TX-PLC, Breaker, Communication with e-meter, In system

#### Cover and safety

Cover in e-meter	IP52
Protection Class	2
Breakdown rating primary/secondary circuits	4 kV 50Hz / 1min

#### Electromagnetic Compatibility

Electrostatic Discharges	as per EN 61000-4-2
Test Voltage	8 kV
High-Frequency Electromagnetic Field	as per EN 61000-4-3
Difficulty Level 3, Vertical and Horizontal Polarization	
Frequency Zone	80 MHz thru 2 GHz
Electric Field Intensity	30 V/m
Fast Transient Phenomena (Impulse Groups)	as per EN 61000-4-4
Impulse Groups Time	15 ms
Impulse Groups Period	300 ms
Test Time	60 s
Test Voltage	4 kV

#### Weight and Dimensions

Weight MT39-L1 / MT39-L3	400g / 160g
Width	125 mm
Height	92 mm
Depth	45 mm

#### Impact of Surroundings

Temperature Range	
Operation	-40°C to + 70°C
Storage	-40°C to + 70°C
Relative humidity	0 ÷ 80%