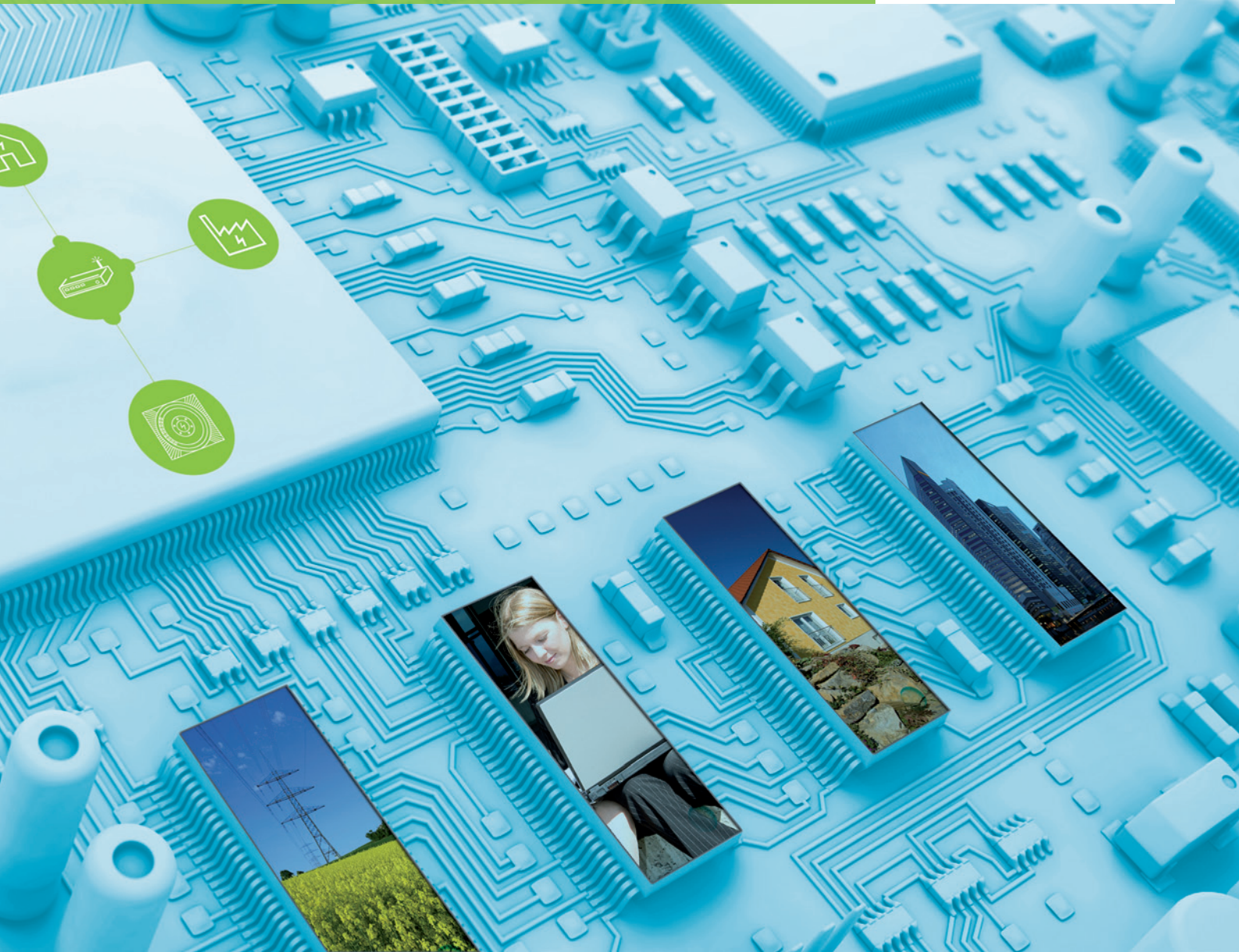


Electricity Meters

Communication Units for Industrial,
Commercial and Grid metering

Landis
Gyr+
manage energy better



Communication Units



E65C
The ultimate in flexibility

The meter will stay - communication technology can change.

The ongoing liberalisation of the energy market brings new challenges for energy suppliers. Maximising the security of investments now has top priority.

Landis+Gyr communication units offer:

- open, standard-based communication
- highest possible flexibility
- extensive functionality
- unique modularity
- intelligent communication capability.

Comprehensive functionality - intelligent communication

The market demands ever more flexibility and lower-cost solutions which new communication possibilities can deliver. Landis+Gyr offers you a comprehensive product range, for all measurement applications including commercial and industrial metering. The integrated or exchangeable communication units provide you with the tools you need for automatic meter reading applications.



Applications	Meter reading
	Maximum demand reset
	Meter synchronisation
	Meter check
	Operational check
	Re-programming
Communication Modes	Internet via Ethernet and GPRS - static or dynamic IP-address possible
	Public switched telephone network via PSTN modems
	Public mobile telephone network via GSM/GPRS modems
	Standard interfaces and bus systems, e.g. RS232, RS485, CS, SO, Ethernet
Communication protocols	DLMS
	IEC 62056-21
	TCP/IP
Plug+play installation	IPT according to DIN 43863-4
	No external power supply
	No wiring
	Free choice of terminal cover
	SIM card easily exchanged
	4-level field -strength display
Additional functions	Connection check
	Customer-specified information on faceplate, e.g. company logo or barcode
	Multi-master operation
	Time windows and time-master functionality
	Modem initialisation, reset and data flow control
	Communication monitoring



Communication

In „master“ operating mode, the communication units permit metering data with other protocols (e.g. SCTM, FNP, etc.) to be transmitted.

Additionally, multi-master operation permits path redundancy for up to 32 locally connected meters with multiple central stations. This guarantees high availability. Simple „plug+play“ installation also keeps installation costs to a minimum.

Complete and reliable access of metering data ensures an efficient billing process for invoices which can be verified by the customer.

With a wide product portfolio, you can employ the most suitable technology for your local conditions, now and in the future, to read out, reset, synchronise, check or re-program your meters from a central station comfortably and in the most cost-effective way.

Communication solution for legacy meters

Meters which are already installed (including from other suppliers) can be equipped with our adapter CU-ADP2, provided that they have a CS, RS232 or RS485 interface.

Software Tools

MAP 110	Service tool for test, certification, installation and local service work of meters and their communication units
MAP 120	Programming tool for reprogramming meters and their communication units

Basic Functionality

Interchangeable Module (Meter-Type T)

	A4	A5	B1**	B2	B4	D2	E20	E22*	M20	M22*	P40	P41*	P42*
GSM Module	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GPRS+GSM Module	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PSTN Modem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ethernet Interface	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RS485 Interface	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
RS232 Interface	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CS Interface	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
MBUS Interface	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* can be used as external communication units

** 2 S0 Pulse Inputs

IP based communication – open and cost efficient

Worldwide access to the Internet, with its low communication costs and open standards, creates completely new communication possibilities for advanced metering.

Meters can communicate using Internet Protocol (IP) via GPRS-based or Ethernet-based connections. Because of open communication standards, you get flexibility and future-proof media choices.

IP technology also offers other advantages: for example, reduction of communication costs by simultaneous data collection of multiple meters. New applications can also be generated. A flexible solution package from Landis+Gyr lets you continue to operate your existing infrastructure, such as central system, meters, etc. and simply upgrade to IP based communication.

If the central AMM system does not support dynamic addressing of IP based metering directly, we have developed the software necessary for remote meter reading via the Internet: iMEGA. This package forms the interface between the meters and the central system, and is also an important security component for the overall system, since access to the meter is password protected. The software can be implemented for meters and AMR systems from several equipment suppliers.

Manage energy better

Landis+Gyr is the leading global provider of integrated energy management products tailored to energy company needs and unique in its ability to deliver true end-to-end advanced metering solutions. Today, the Company offers the broadest portfolio of products and services in the electricity metering industry, and is paving the way for the next generation of smart grid.

With annualized sales of more than US\$1.5 billion, Landis+Gyr, a independent growth platform of the Toshiba Corporation (TKY:6502) and 40% owned by the Innovation Network Corporation of Japan, operates in 30 countries across five continents, and employs 5,000 people with the sole mission of helping the world manage energy better.

More information is available at landisgyr.eu

Landis+Gyr in short

- 5000 employees worldwide
- Operations on all five continents
- Broadest portfolio of products and services in the industry
- 25 years of smart metering experience
- 1000 AMM systems delivered
- 300 million energy meters produced
- Largest relevant engineering capacity in the industry
- 65 years of direct load management experience
- 25 million load management receivers produced
- ISO certified for quality and environmental processes
- World leader in integrated energy management solutions
- Committed to improved energy efficiency and environmental conservation
- Solid and established partner network

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