

# LANDIS+GYR TRAINING:

#### **EMEA TRAINING CENTER**

Whether you are looking for an introduction to metering technology or you need to get up to speed on a specific product, we offer you a comprehensive curriculum to help you reach your goals.

Our training courses may help you master metering technology skills to a level of being able to understand, deploy, maintain, and secure metering infrastructures. Once you have begun to understand the basics, you can focus on specialized training on our products and solutions.

#### **General Information**

Standard Training Modules

Landis+Gyr provides training modules for all levels of knowledge and experience. Whether a new employee needs to learn the basics of metering technology, an experienced support technician has to become acquainted with one of our new products, or an expert project leader wants to acquire in-depth knowledge of a full end-to-end solution, Landis+Gyr assists customers to achieve what they require.

#### Standard training modules are offered at three levels:

Basic	Advanced	Expert
The Basic Modules provide a general overview of Landis+Gyr products and solutions.	The Advanced Modules dig deeper into specific topics. Employees learn to work with and support products and solutions in their standard environment.	The Expert Modules are workshops focusing on specific topics in (almost) real situations. Advanced level is required to attend Expert modules.

See our **Training Schedule** (http://po.st/LGTrainingSchedule) to register for training courses. All meter courses contain correspondig MAP tools training.

#### **Customized Training Sessions**

Customized training sessions can be set up to effectively address the specific training needs of our customers. The training program is created based on specific needs and dedicated to individual customers.

See our **Customized Training Sessions** (http://po.st/LGCustomTraining) page for details.

For more detailed information, please contact your local sales representative or our Training Services Center in Prague.

## TRAINING CENTER PORTFOLIO OVERVIEW

	Page	Languages a	wailability*
Devices Training Courses		EN	DE
Industrial Commercial Grid Meters	4	•	•
Residential Meters	6	•	•
Concentrators	7	•	•
Technology Training Courses	8	•	•
Use Case Training Courses	9	•	•
Software Training Courses			
Gridstream HES	10	•	
Gridstream AIM	11	•	
Gridstream Converge	12	•	
Advance ECOnomic	13	•	
W1000	14	•	
Advanced Grid Analytics	14	•	
News	15		
Contacts	16		

\*Documents and Trainings in French and Italian exceptionally available upon request

## INDUSTRIAL COMMERCIAL GRID

## E850 Grid Meter

A high precision meter for conventional VT/CT.

## E880 Grid Meter

A high precision meter for non-conventional VT/ CT (NCIT) and power substations with sampled values according to the IEC 61850-9-2 standard.



E850/E880	Ba	sics and Se	etup	Parametrization
	Basic		Advanced	Expert

## E650 Industrial and Commercial Meter

A proven meter for commercial, industrial and smart grid applications.

## S650 Smart Grid Terminal

An innovative smart grid solution for transformer station monitoring and street light control.

## E65C

Communication module for the E650 and S650.



E650/\$650	Ba	sics and Se	etup	Parametrization
E65C				Communication
	Basic		Advanced	Expert

## **E570 Commercial Meter**

An advanced current transformer connected meter designed for high current/low voltage consumers with AMI core functionalities and IDIS compliant.

The meter features built-in support for multi-energy, can be equipped with exchangeable communication modules and has G3-PLC communication capability.



E570	Basics and Setup	Parametrization
	Basic Advanced	Expert



## E750 Industrial and Commercial Meter

The SyM<sup>2</sup>-compliant meter based on a multi-modular architecture for commercial & industrial applications.

E750		On Request	t	
	Basic		Advanced	Expert

## RESIDENTIAL

#### **E450 Residential Meter**

An advanced residential meter which incorporates core functionalities, such as powerful e-metering, multi-energy data collection, remote and local communication and end user interaction.

E450 has integrated power line communication (PLC) either with IDIS PLAN+ or IDIS G3-PLC.



#### E350 Residential Meter

A modular residential meter with functionality for recording, billing and network monitoring.

#### E35C

A family of communication modules with a wide range of communication technologies such as PLC, Ethernet, GPRS/UMTS.

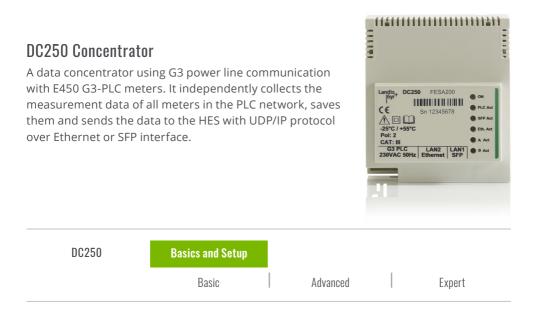


E350+E35C/E450	Bas	sics and Se	etup	Parametrization
	Basic		Advanced	Expert

#### **DC450 Concentrator**

A new generation intelligent data concentrator for large scale meter reading and controlling over power line communication.





## **TECHNOLOGY TRAINING COURSES // SMART METER NETWORKS**

#### DLMS

DLMS/COSEM is the global standard for smart energy metering, control and management. It specifies an object-oriented data model, an application layer protocol and media-specific communication profiles.





## G3-PLC

G3-PLC was developed to meet the industry's need for a potentially ubiquitous powerline communications standard that will enable the smart grid vision. G3-PLC facilitates high-speed, highly reliable, long range communication over the existing powerline grid.

With the ability to cross transformers, infrastructure costs are reduced and with the support of IPv6, G3-PLC will support powerline communications into the future.





#### **Metering Basics**

Training prepared for people with little experience in metering, as an introduction into the world of measurement and data readout.



## Installation Training

Training for technicians and installers at a distribution company, who need to have an overview of their installed meter base and how to use all the functions, eventually cleanup.

Installation	Basics, Service and Readout			
	Basic		Advanced	Expert

## Distribution System Operator Training

Training for main technicians working at a distribution or transmission system operator, who need to operate and parametrize the devices they use. Also used as a support training for new customers.

Distribution	Basi	ics, Service, R	eadout and Pa	arametrizat	ion
	Basic		Advanced		Expert

## Grid System Operator Training

Training for main technicians working at a distribution or transmission system operator, who need to operate and parametrize the high precision meters from our portfolio.

Grid	Bas	ics, Servio	e, Readout and Pa	rametriza	tion
	Basic		Advanced		Expert

## SOFTWARE TRAINING COURSES

#### **Gridstream HES**

Gridstream HES is the communication and data collection layer between the metering data management system and the metering network. Its main purpose is to collect metering data reliably from smart meters and provide it on-time to other systems.

Gridstream HES provides on-demand data, event and alarm information for other systems and has monitoring tools to ensure the best possible availability of the meters in the field.



Gridstream HES	Data Acquisition	Tools	
	Basic	Advanced	Expert

#### **Gridstream AIM**

A fully integrated end-to-end advanced metering management system (AMM).

AIM stores and prepares metering information for viewing, reporting or use in other applications. It includes functionalities for efficient smart metering data collection and control as well as for data storage, validation and unification.



Gridstream AIM	Use	Administrator	
	Basic	Advanced	Expert
	Data Acquisition	Deployment	
User Course Content	Data Processing	Tools	
_		Site Service	
	Basic	Advanced	Expert
Administrator Course Content			System Administr
OUNIGIIL	Basic	Advanced	Expert

## SOFTWARE TRAINING COURSES

#### **Gridstream Converge**

An advanced end-to-end metering management (AMM) system for industrial, commercial and grid applications.

Gridstream Converge is deployed for municipal utilities and as a high-availability, redundant system for very large utilities. It processes electricity, gas, heat and water data. The system's scalability and modularity ensure tailored system configuration.



ridstream Converge	Us	Administrator	
	Basic	Advanced	Expert
	Data Acquisition	Consumer Tree	
User Course Content	Data Analysis	Data Processing	
		Calculations	
	Basic	Advanced	Expert
Administrator Course			System Administra
Content			Reporting
	Basic	Advanced	Expert

#### **Advance ECOnomic**

An advanced end-to-end metering management (AMM) system for smaller operators who want to capture the benefits of smart metering.

It is a cost-efficient system enabling support of basic benefits such as accurate billing based on actual consumption and remote operations (e.g. on-demand readings).



Advance ECOnomic	Data Ac	quisition a	ind Tools	System Administrator
	Basic		Advanced	Expert

#### W1000

Application developed to offer a powerful graphical tool and useful reports to users.

Users can view their metering data in a variety of different forms including multiple views to sort desired information.





## **Advanced Grid Analytics**

Application designed to help solve power quality, grid reliability, revenue protection and other operational challenges by harnessing available data.

This proven solution applies meter and distribution network data to system models so information can be visualized to quickly detect and locate trouble spots or plan for upgrades.



Advanced Grid Analytics	Operations			
	Basic	Advanced		Expert

## NEWS

#### Implementation of an eLearning solution

During 2018, we analyzed and evaluated several software suites to deliver training content to our customers, as we aim to introduce a state-of-the-art eLearning solution.

This will provide training on various topics that are either not included in the main training courses or are individual small sessions on topics such as:

MAP Tools
CII
Multi-utility
SAAS manuals

The plan is to have this tool available for the general public in the second half of 2019.





#### TRAINING LOCATION PRAGUE

Landis EMEA Training Centre Plzeňská 5/A CZ-150 00 Prague 5

Phone +421 258 267 112

training@landisgyr.com www.landisgyr.eu/training



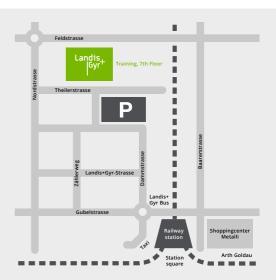
#### **TRAINING LOCATION ZUG**

Landis+Gyr AG Training Room Theilerstrasse 1 CH-6300 Zug

Phone

+41 41 935 6500

training@landisgyr.com www.landisgyr.ch/training



While this document has been prepared in good faith it is provided 'as is' and no representation, warranty (including, without limitation, warranties for merchantability, fitness for a particular purpose or non-infringement of intellectual property rights), assurance or undertaking (express or implied) is or will be made and no responsibility or liability is or will be accepted by Landis+Gyr or its officers, employees or agents in relation to the adequacy, accuracy, completeness or reasonableness of this document, or of any other information (whether written or oral), notice or document supplied or otherwise made available in connection herewith. All and any such responsibility and liability is expressly disclaimed. April 2019, © Landis+Gyr AG.