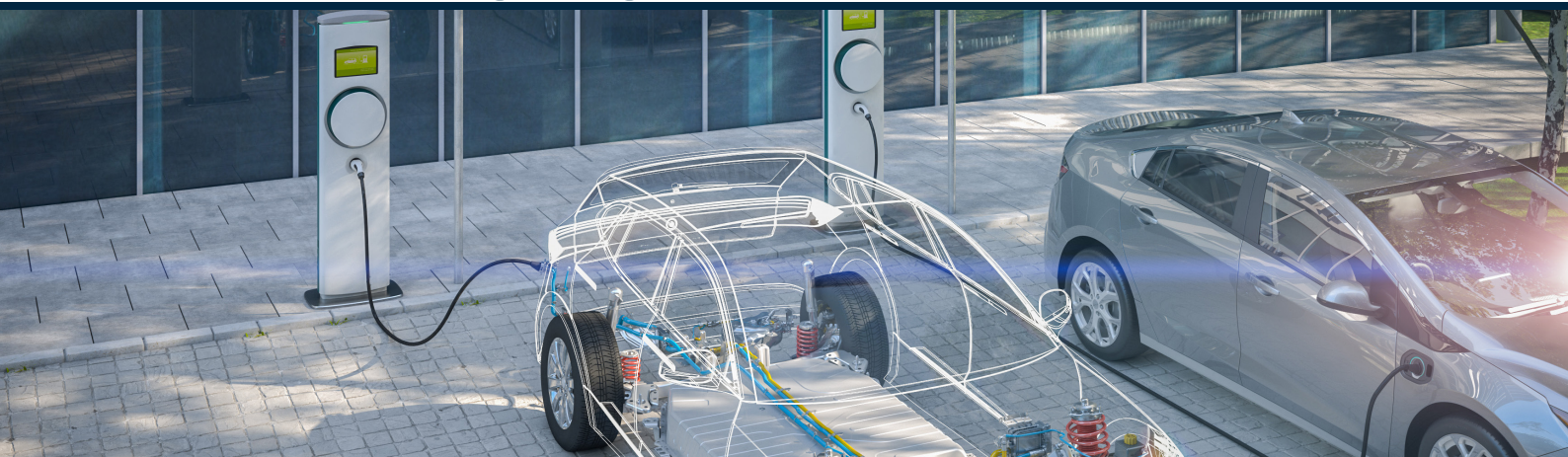


Solutions

Electric Vehicle (EV) Charging

Solutions for EV Charging



Designed to meet market requirements

The Electrical Vehicle (EV) charging landscape is undergoing significant and impactful change.

As electric vehicles transition from the “novelty phase” towards becoming a positive, yet disruptive technology, it is predicted that several million electric vehicles will be on the roads by 2025.

Whether it is Level 1, 2, or 3 charging, consumption metering will continue to be extremely important, especially to support bi-directional energy demands and billing.

As we transition to more Smart Cities, and we embrace the Internet of Things (IoT), it will also be necessary to treat electric vehicles as “grid assets”, where the batteries in electric vehicles can be used to power other loads.

Carlo Gavazzi has a rich history providing innovative, high-quality components and solutions to OEMs and Systems Integrators.

Today, we have many installations of energy metering products successfully operating in EV charging equipment around the globe.

As future needs emerge, we are ready with an integrated platform, our UWP 3.0, that can perform control functions like active control as well as data logging and gateway functions.

This provides the means for communications over traditional Wi-Fi, Cellular, and LoRaWAN®.

Our platform is also a powerful Edge device that bridges the Field, Automation, and Management levels of EV charging automation.

- [Video](#)

About Carlo Gavazzi

Carlo Gavazzi Automation is a multinational electronics group active in the design, manufacture and marketing of electronic equipment targeted at the global markets of industrial and building automation.

Our history is full of firsts and our products are installed in a huge number of applications all over the world. With more than 80 years of successful operation, our experience is unparalleled.

We have our headquarters in Europe and numerous offices around the world.

Our R&D competence centres and production sites are located in Denmark, Italy, Lithuania, Malta and China.

We operate worldwide through 22 of our own sales companies and also selected representatives in more than 65 countries, from the United States in the West to the Pacific Rim in the East.

Our core competence in automation spans three product lines: Sensors, Switches and Controls.

Our extensive product portfolio includes sensors, monitoring relays, timers, energy management system, solid state relays, safety devices and fieldbus systems.

We focus our expertise on offering state-of-the-art product solutions in selected market segments.

Our customers include original equipment manufacturers of packaging machines, plastic-injection moulding machines, food and beverage production machines, conveying and material handling equipment, door and entrance control systems, lifts and escalators, as well as heating, ventilation and air-conditioning devices.

LoRaWAN® is a mark used under license from the LoRa Alliance®.



1-phase energy analyzers



EM111

The EM111 is an energy analyzer with LCD, touchscreen display and optional RS485 Modbus communication. It can measure up to 45 AAC, with a 6 mm² cross section terminals, at 276 VAC without the need for any external current transformer.

- [Datasheet EM111](#)
- [Overview by product](#)

1-, 2- or 3-phase energy analyzers/transducers



EM330 / EM340 / ET330

The EM330 and the EM340 energy analyzers (respectively by 5 AAC CTs and 65 AAC direct) and the ET330 energy transducer are designed for active energy metering and for cost allocation. Housing for DIN-rail mounting. The transducer is provided with RS485 Modbus port, while the analyzers come with either communication or pulse output.

- [Datasheet EM330](#)
- [Datasheet EM340](#)
- [Datasheet ET330](#)
- [Overview by product](#)
- [Video](#)

2- or 3-phase energy analyzers



EM540

The EM540 is a "direct connect" energy analyzer that will handle up to 65 A of current directly connected without a Current Transformer. It is ideal for EV Chargers as it measures 415 VAC 3-phase and 230 VAC single phase. The EM540 features an accuracy class 1 and has a crisp, bright, backlit LCD display.

- [Datasheet EM540](#)
- [Video](#)

1-, 2- or 3-phase energy analyzers



EM24

Three-phase energy analyzer for DIN-rail mounting with configuration joystick, frontal selector and LCD display. Available with Modbus TCP port, it can manage voltage inputs up to 480 VAC, managing either "direct connected" currents up to 65 A or 5 A current transformer and potential transformers.

- [Datasheet EM24](#)
- [Overview by product](#)

Controller, gateway and data logger



UWP 3.0

The UWP 3.0, Universal Web Platform is a micro Linux-based PC with a built-in Web server and Web service capability. It includes event and data logging from Modbus, Modbus/TCP, and Dupline®. The UWP 3.0 functions as a local gateway for Modbus/TCP and includes remote gateway functions (FTP, SFTP, FTPS, Rest-API). Microsoft Azure and Amazon AWS certified. It also performs control functions.

- [Datasheet UWP 3.0](#)
- [Overview by product](#)
- [Video](#)

Endpoint adapter for LoRaWAN®



UWP A / UWP M

The UWP A is the key to convert any Carlo Gavazzi energy meter or analyzer into an IIoT device, for joining a LoRaWAN® network and sending data to Energy Management Systems, Energy Billing Portals or Facility/Asset Management Solutions. The UWP M is the long range wireless concentrator to connect multiple UWP A endpoints to the UWP 3.0 controller.

- [Datasheet UWP A / UWP M](#)
- [Overview by product](#)

Low-profile power supplies



SPMA

SPMA series of "low profile" power supplies offer high efficiency (up to 89%) in a small space-saving package. The SPMA has short-circuit and overload protection with an LED indicator for "low-voltage".

- [Datasheet SPMA](#)
- [Overview by product](#)
- [Application note](#)

Miniature limit switch



PS21M

Carlo Gavazzi offers many solutions for de-energizing the power circuit when the EV charger panel or door is opened. One such product is the PS21M series, which assures the EV charging enclosure/door is closed. Designed for rugged environments, the PS21M switches are compact and provide an integrated connection cable.

- [Datasheet PS21M](#)

LoRaWAN® is a mark used under license from the LoRa Alliance®.

Solutions for EV Charging - 11/21 - [CARLO GAVAZZI Automation Components](#). Specifications are subject to change without notice. Illustrations are for example only.

OUR SALES NETWORK IN EUROPE

AUSTRIA

Carlo Gavazzi GmbH
Ketzergasse 374,
A-1230 Wien
Tel: +43 1 888 4112
Fax: +43 1 889 1053
office@carlogavazzi.at

FRANCE

Carlo Gavazzi Sarl
Zac de Paris Nord II, 69, rue de la Belle Etoile,
F-95956 Roissy CDG Cedex
Tel: +33 1 49 38 98 60
Fax: +33 1 48 63 27 43
french.team@carlogavazzi.fr

ITALY

Carlo Gavazzi SpA
Via Milano 13,
I-20045 Lainate
Tel: +39 02 931 76 1
Fax: +39 02 931 76 301
info@gavazziacbu.it

SPAIN

Carlo Gavazzi SA
Avda. Iparragirre, 80-82,
E-48940 Leioa (Bizkaia)
Tel: +34 94 480 40 37
Fax: +34 94 431 60 81
gavazzi@gavazzi.es

BELGIUM

Carlo Gavazzi NV/SA
Mechelsesteenweg 311,
B-1800 Vilvoorde
Tel: +32 2 257 41 20
sales@carlogavazzi.be

GERMANY

Carlo Gavazzi GmbH
Pfnorstr. 10-14
D-64293 Darmstadt
Tel: +49 6151 81 00 0
Fax: +49 6151 81 00 40
info@gavazzi.de

NETHERLANDS

Carlo Gavazzi BV
Wijkermeerweg 23,
NL-1948 NT Beverwijk
Tel: +31 251 22 93 45
Fax: +31 251 22 60 55
info@carlogavazzi.nl

SWEDEN

Carlo Gavazzi AB
V:a Kyrkogatan 1,
S-652 24 Karlstad
Tel: +46 54 85 11 25
Fax: +46 54 85 11 77
info@carlogavazzi.se

DENMARK

Carlo Gavazzi Handel A/S
Over Hadstensevej 40,
DK-8370 Hadsten
Tel: +45 89 60 61 00
Fax: +45 86 98 15 30
handel@gavazzi.dk

GREAT BRITAIN

Carlo Gavazzi UK Ltd
4.4 Frimley Business Park,
Frimley, Camberley, Surrey GU16 7SG
Tel: +44 1 276 854110
Fax: +44 1 276 682140
sales@carlogavazzi.co.uk

NORWAY

Carlo Gavazzi AS
Melkeveien 13,
N-3919 Porsgrunn
Tel: +47 35 93 08 00
Fax: +47 35 93 08 01
post@gavazzi.no

SWITZERLAND

Carlo Gavazzi AG
Verkauf Schweiz/Vente Suisse
Sumpfstrasse 3,
CH-6312 Steinhausen
Tel: +41 41 747 45 35
Fax: +41 41 740 45 40
info@carlogavazzi.ch

FINLAND

Carlo Gavazzi OY AB
Ahventie, 4 B
FI-02170 Espoo
Tel: +358 9 756 2000
myynti@gavazzi.fi

PORTUGAL

Carlo Gavazzi Lda
Rua dos Jerónimos 38-B,
P-1400-212 Lisboa
Tel: +351 21 361 70 60
Fax: +351 21 362 13 73
carlogavazzi@carlogavazzi.pt

OUR SALES NETWORK IN THE AMERICAS

USA

Carlo Gavazzi Inc.
750 Hastings Lane,
Buffalo Grove, IL 60089-6904, USA
Tel: +1 847 465 61 00
Fax: +1 847 465 73 73
sales@carlogavazzi.com

CANADA

Carlo Gavazzi Inc.
2660 Meadowvale Boulevard,
Mississauga, ON L5N 6M6, Canada
Tel: +1 905 542 0979
Fax: +1 905 542 2248
gavazzi@carlogavazzi.com

MEXICO

Carlo Gavazzi Mexico S.A. de C.V.
Circuito Puericultores 22, Ciudad Satelite
Naucalpan de Juárez, Edo Mex. CP 53100
Mexico
T +52 55 5373 7042
F +52 55 5373 7042
mexicosales@carlogavazzi.com

BRAZIL

Carlo Gavazzi Automação Ltda.
Av. Francisco Matarazzo, 1752
Conj 2108 05001-200 - São Paulo - SP
Tel: +55 11 3052 0832
Fax: +55 11 3057 1753
info@carlogavazzi.com.br

OUR SALES NETWORK IN ASIA AND PACIFIC

SINGAPORE

Carlo Gavazzi Automation Singapore Pte. Ltd.
61 Tai Seng Avenue #05-06
Print Media Hub @ Paya Lebar iPark
Singapore 534167
Tel: +65 67 466 990
Fax: +65 67 461 980
info@carlogavazzi.com.sg

MALAYSIA

Carlo Gavazzi Automation (M) SDN. BHD.
D12-06-G, Block D12,
Pusat Perdagangan Dana 1,
Jalan PJU 1A/46, 47301 - Petaling Jaya,
Selangor, Malaysia
Tel: +60 3 7842 7299
Fax: +60 3 7842 7399
info@gavazzi-asia.com

CHINA

Carlo Gavazzi Automation
(China) Co. Ltd.
Unit 2308, 23/F.,
News Building, Block 1, 1002
Middle Shennan Zhong Road, Futian District,
Shenzhen, China
Tel: +86 755 8369 9500
Fax: +86 755 8369 9300
sales@carlogavazzi.cn

HONG KONG

Carlo Gavazzi Automation
Hong Kong Ltd.
Unit No. 16 on 25th Floor, One Midtown,
No. 11 Hoi Shing Road, Tsuen Wan,
New Territories, Hong Kong
Tel: +852 26261332 / 26261333
Fax: +852 26261316

TAIWAN

Branch of Carlo Gavazzi Automation
Singapore Pte. Ltd.
22F-1, No.500 Shizheng Rd, Xitun Dist,
Taichung City 407,
Taiwan, China
Tel. +886 4 2258 4001
Fax +886 4 2258 4002

OUR COMPETENCE CENTRES AND PRODUCTION SITES

DENMARK

Carlo Gavazzi Industri A/S
Hadsten

MALTA

Carlo Gavazzi Ltd
Zejtun

ITALY

Carlo Gavazzi Controls SpA
Belluno

LITHUANIA

Uab Carlo Gavazzi Industri Kaunas
Kaunas

CHINA

Carlo Gavazzi Automation (Kunshan) Co., Ltd.
Kunshan

HEADQUARTERS

Carlo Gavazzi Automation SpA
Via Milano, 13
I-20045 - Lainate (MI) - ITALY
Tel: +39 02 931 76 1
info@gavazziautomation.com

Energy to Components!

www.gavazziautomation.com