

Don't miss out on important information such as new products, user tips, events and more.
Sign up here for the international A. Eberle newsletter: www.a-eberle.de/newsletter

We take care of it.



Measure. Regulate. Across all grids.

Shaping the grid infrastructure of tomorrow
– this is our goal.

With our future-oriented solutions, we help our customers
to face future challenges.

a-eberle
40 Years of experience in measure and regulation technology

Founded in 1980 and located at „FrankenCampus“ in Nuremberg

140 Employees all dedicated to our corporate mission:
Clarity, Openness & Fairness

Active at all voltage levels in production, transport and distribution of electrical energy

Operating internationally in approx. 65 countries

A. Eberle GmbH & Co. KG
Frankenstraße 160
90461 Nürnberg
Deutschland
+49(0)911 628108-0
info@a-eberle.de
www.a-eberle.de



Product overview

		»REGSys®« – Voltage Regulation		»EORSys« – Earth Fault Compensation		»EORSys« – Current Injection		»EORSys« – Short-Circuit and Earth Fault Indicators		»LVRSys®« – Low Voltage Regulation		
		REG-D	REG-DA	REG-DP	REG-DPA	MCI	CIF	HPCI	EOR-3DS	EOR-IDS	LVRSys Outdoor	LVRSys Indoor
Design		Various Designs 19" plug-in module, surface-mounted and panel-mounted housing	Metal Housing for wall mounting housing, Panel mounting housing and din-rail mounting	Various Designs 19" plug-in module, surface-mounted and panel-mounted housing	Metal Housing for wall mounting housing, Panel mounting housing and din-rail mounting	Wall Mount Housing	Various Designs in outdoor or indoor control cabinet or on mounting plate	Various Designs in outdoor or indoor control cabinet or on mounting plate	Various Designs Panel mounting housing, or alternatively mountable on DIN rail mounting	Various Designs Panel mounting housing, or alternatively mountable on DIN rail mounting	Various depending on requirements	Various depending on requirements
Function 1		Regulation and control of transformers with on-load tap-changers		Reliable Earth Fault Compensation		8 Frequency multifrequency current injection (15 - 160 Hz)	2-Frequency current injection	2-Frequency current injection and pulse cabinet	Earth-Fault and Short-Circuit Indicator for intelligent sub-stations	Earth-Fault and Short-Circuit Indicator (directed/undirected)	High resistance to over voltages, direct and indirect lightning strikes	Voltage stabilization for longer lasting & more efficient machines
Function 2		Limit value monitoring, parallel operation with ParaGramer, current influence, detection of creeping network failures		Expandable with Current Injection for low or highly variable zero-sequence voltages			Calculation of detuning without coil procedure		Fault Recorder and Logbook for precise error analysis		Overload capable like NH fuse	No grid interference causes no flicker or harmonics
Function 3		Applications: Voltage Regulation, three winding transformer, transformer banks, phase shifting transformers, variable shunt reactor		Parallel control		Usable for networks up to 1300 A Iice (20 kV)	Usable for networks up to 1000 A Iice (20 kV)	Usable for networks up to 1000 A Iice (20 kV)	Compatible to many low power sensors	Incl. Rogowski Coil Sensors and low power Sensors	Robust Tolerates harmonics and flicker	Robust Tolerates harmonics and flicker
Function 4		Voltage control system can be created by adding further options or devices	Configurable hardware with various options	Resistance control		Inductance not necessary	16 A Inductance for Current Injection incl. automatic power adjustment and phase selection		Additional intelligent functions through free programmability	–	Highly efficient > 99,5 %	
Function 5		Expandable by customer specific programming		Expandable by customer specific programming		–	–	Pulse location with up to 140 A secondary pulse stroke in case of earth fault (up to 30 min)	2x Ethernet 100 mm mounting depth	Long-life Capacitor for >4h operation	Easy installation as a cable distribution cabinet	Intuitive operating concept Simplest parameterization via display
Function 6		SCADA Protocols: IEC 61850 inkl. GOOSE and Sampled Values, IEC 60870-5-101/103/104, Modbus, DNP 3.0, Spabus, Profibus-DP				SCADA via REG-DP(A)			SCADA Protocols: IEC 61850 GOOSE, IEC 60870-5-101/103/104, Modbus, Modbus-Master, DNP 3.0, MQTT IoT, MQTT Management & Operations	Modbus RTU	Adjustable response time of the controller < 30 ms to 100 s	Immediate regulation < 30 ms response time
Software/ Function 7		AEToolbox		AEToolbox		AEToolbox via REG-DP(A)	AEToolbox via REG-DP(A)	AEToolbox via REG-DP(A)	AEToolbox (encrypted TCP/IP communication)	No Software save & load parameters via SD-Card	Operating Temperature -40°C up to +50°C ambient temperature	

Comparison Power Quality Tools

*Easy to operate,
highly accurate.*

	Basic
Option	
Data memory (memory optional)	
Sampling frequency voltage / transient measurement	
Sampling frequency current	
Input voltage (resolution)	
Input current (resolution)	
Bridging energy failure	
IP protection	
Voltage harmonics according to IEC 61000-4-30 Ed. 3 K1.A	
Voltage harmonics 200 Hz frequency bands - 2 kHz to 9 kHz (IEC 61000-4-7)	
Display (Inch)	
Digital In- and Outputs (Trigger)	
Residual Current Monitoring RCM & FCM	
Temperature input for PT100 / PT1000 / KTY	
Automatic evaluation according to norms	
Magnitude V,A	
Voltage and current harmonics up to	
WiFi Option	
FFT bandwidth up to	

Basic 20



Hz

Any questions or would you like advice on our solutions?
Please feel free to contact us at sales@a-eberle.de

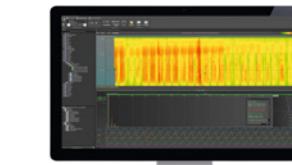
Power Quality Services

a-eberle

»PQSys« - Softw

WinPQ – high-quality PQ analysis softw

WinPQ system solution for all fixed-installed fault recorders, power quality measuring devices and mobile network analyzers from A. Eberle. Permanent monitoring of power quality - from high voltage to the end customer in one system.



WebPQ® – the intelligent add-on for WinPQ
The fully responsive & web-based user interface as an installable app for evaluating your power quality data in your local IT environment.

»PQMobil« - Software

ment WinPC

- Extensive evaluation functions such as load analysis or the ability to determine the cause of network faults
 - Automatic report creation to preset or freely adjustable standard settings
 - Free software and free updates of the evaluation software and device firmware

PQ-Box App for Android and

A free app for Android and iOS operating systems allows all PQ Boxes with integrated WLAN/Wi-Fi interfaces to be operated wirelessly. All measuring devices can also be parameterised very easily using smartphone or tablet.

