

Energy meter for monitoring customers and distribution transformers.

Fight Losses

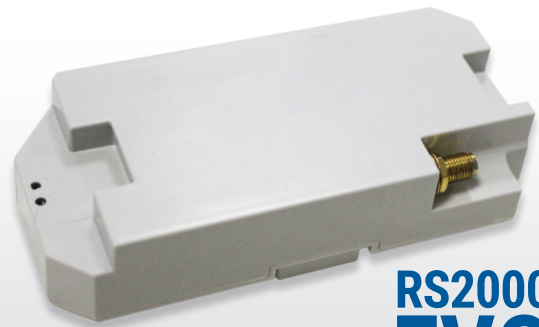
Designed to meet precision, robustness, durability and practicality requirements in operation, **easyTRAFO** is an energy meter for monitoring customers and distribution transformers, helping in the fight against commercial losses and in monitoring the quality of electricity supply.

Energy Balance

With low purchase and installation cost, **easyTRAFO** allows distributors to apply generalized energy balance metering in LV distribution circuits, thus making it easier to find commercial losses, indicating and directing inspection, increasing assertiveness and reducing operating costs.







Quality Indicators

Moreover, **easyTRAFO** can monitor supply quality, meeting Prodist Module 8 requirements. Monitoring and Indicators of Steady-State Voltage, Voltage Imbalance, Power Factor, Total Harmonic Distortion of Voltage and Current, as well as Short-Duration Voltage Variation.



Remote Terminal Unit

**RS2000
EVO
ZEUS**

-  **3G/GPRS** remote communication, with possibility of dual SIM Card¹.
-  Direct interface with meter, with protocol integrated into Hemera[®] MDM, allowing the collection of logger readings, instantaneous measurements and configuration.
-  **Local configuration or local reading** via **Bluetooth** interface.
-  **LAST GASP Alarm.**
-  Internal equipment **temperature** indicator.
-  **Remote firmware upgrade** of the remote terminal unit.

¹Other IoT technologies available on demand. Contact us.

RS2000 EVO ZEUS



Connectivity – Smart Grids

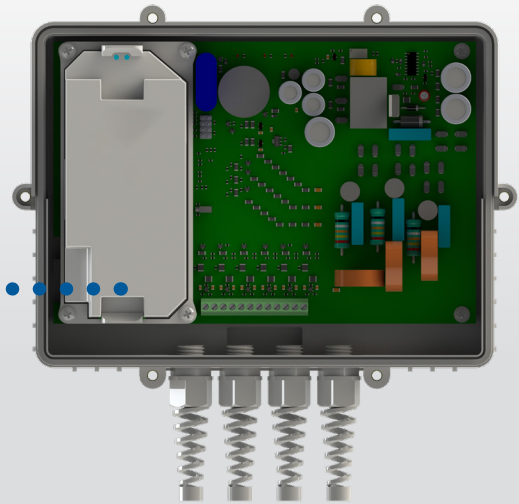
easyTRAFO has a compartment (slot) for connecting the **remote terminal unit**, in accordance with the best practices for integration within a modular concept. Connected through this multi-protocol communication interface, it is able to support various communication technologies from different distribution management solution providers.

Distribution Supervision

Connected to the distributor's supervisory system, it provides real-time measurements for monitoring supply quality, phase failure or sinking alarms, transformer or circuit charging and unbalance, among others, providing a quick response in resolving distribution anomalies.

Consumer Verification

Its versatility and high accuracy class can also be applied to comparative metering of low voltage consumers to fight losses. In its configurations, **easyTRAFO** can be used in single-phase units up to 800A three-phase units.



Benefits

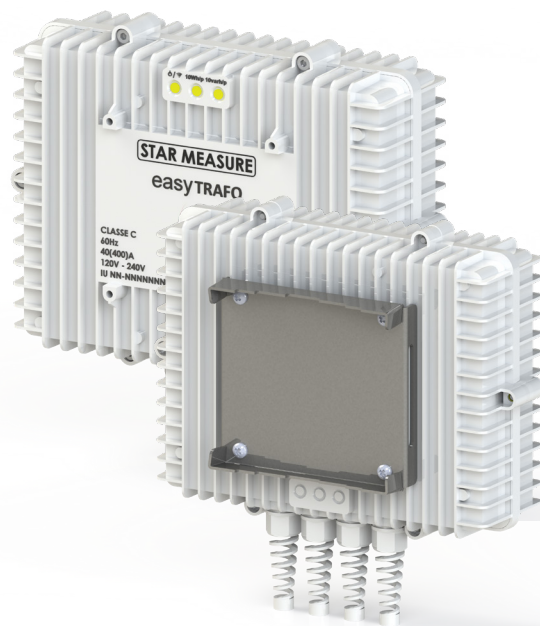
- High Accuracy Class
- Wide Metering Range
- Class C – 0.5%
- Active and Reactive Energy
- Voltages and Current
- Voltage and Current THD
- 18 Memory Channels
- Supply Supervision
- Quality Events
- Alarms (LastGasp)
- Prodist M8 Indicators
- 6 Metering Elements
- 2-Circuit Metering and Integration
- IP Metering
- Robust, Light and Compact
- Outdoor Installation
- Connection with Live Line

Technical Specification

Mechanical Characteristics

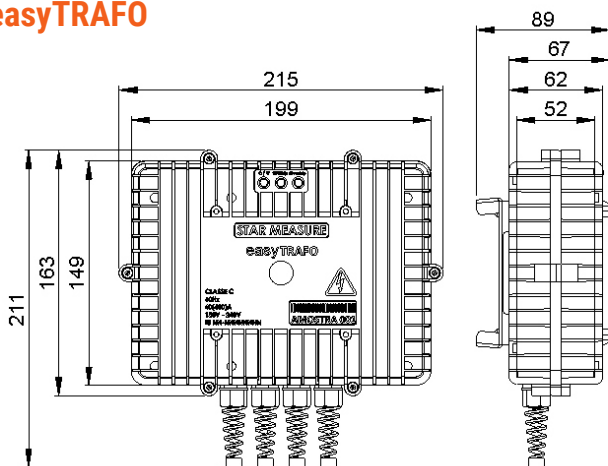
Materials and Protection	T-120B	T-400B	T-800B	
Enclosure	Material	Polycarbonate		
	Flame proof	cat - V0		
	Anti-UV	Yes		
	Protection	IPW 68		
	Weight	0.4kg		
Cables	Material	PV (Copper)		
	Insulation	1KV		
	Flame proof	cat - V0		
	Anti-UV	Yes		
TCs (EASY I)	Material	Polycarbonate (Silicon Steel)		
	Insulation	1KV		
	Flame proof	cat - V0		
	Anti-UV	Yes		
	Protection	IP 66		
Support and Fixation	Weight (un)	0.18kg	0.35kg	0.35kg
	Material	STAINLESS Steel xxx		
	Handling	STAINLESS STEEL		
	Flame proof	cat - V0		
Set	Weight	1.44kg	1.95kg	2.95kg

easyTRAFO
easyMEASURE

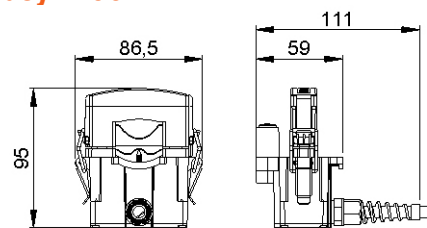


Technical Design

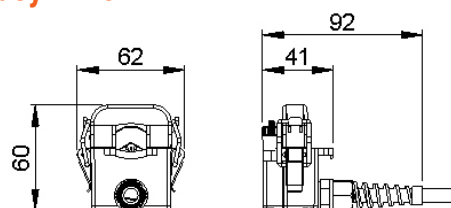
easyTRAFO



easyI-400



easyI-120



Technical Specification

Electrical Characteristics

Electrical and Metrological		T-120	T-400	T-800
Connection	Phases / Elements	3 / 3	3 / 3	3 / 6
	Diagram	Star / Delta		
	Type	Indirect		
	Maximum Gauge	70mm ²	185mm ²	
	Minimum Gauge	2.5mm ²	6mm ²	
Rated Values	Voltages	120V – 240V		
	Current.	10A	40A	40A
	Max. Current	120A	400A	800A
	Frequency	50 – 60Hz		
Power Supply	Three phase (2 Wires)	60V/1F to 300V/3F (FN)		
Class	RTM / IEC / OIML	C / 0.5S / C		
Metering	Sample/cycle rate	128 samples/cycle		
	Resolution (A/D)	16bits		
Metering Range	Voltage	5V to 300V		
	Current	0.2% in to 10x In 20x in		
	Frequency	45Hz to 65Hz		
Consumption	Maximum	2Wh		
Indicators (LEDs)	Active	kh = 8Wh / Pulse		
	Reactive	kh = 8Varh / Pulse		
	On / Comm.	On / BLE		
RTC	Clock/Calendar	+5PPM (-15°C to 60°C)		
Conservation	Data	Non-volatile memory		
	Clock/Calendar	CAP 120h		
Condition Temperature	Operation	-20°C to +85°C		
	Storage	-20°C to +85°C		
	Humidity	100% (Not cond.)		

Communication

Interfaces		
BLE 4.0	Standard	BLE
	Protocols	MP SERIES (ABNT)
SERIAL	Standard	(slot) RS232
	Protocols	MP SERIES (ABNT)
		DLMS COSEM**

Features

Loggers

Active and Reactive Energy – 4 quadrants

Mass Memory (18 Channels)

Active and Reactive Energy – direct and reverse
Voltage and Current per Phase

Total Harmonic Distortion of Voltage per Phase

Quality (Events and Indicators)*

Steady-state voltage

Voltage Unbalance

Power Factor

Frequency Variation

Short-Duration Voltage Variation

Total Harmonic Distortion of Voltage

Transformer / Circuit Charging

Alarms

Last gasp function for power outages

Quality Events*

Transformer / Circuit Charging

Models / Configuration

easyTRAFO 120

3 elements – 120A

easy1-120A

easyTRAFO 400

3 elements – 400A

easy1-400

easyTRAFO 800

6 elements – 400A

easy1-400

* available in 10/2019 via updated PO

** available 01/2020