

# INDRIVETEC AG

"bricks up" flexible energy storage systems

"BRICK" IDT-Energy Management System Hardware

## IDT Power Grid Measurement Box

Power Supply with UPS Option

Robust Industrial Controller

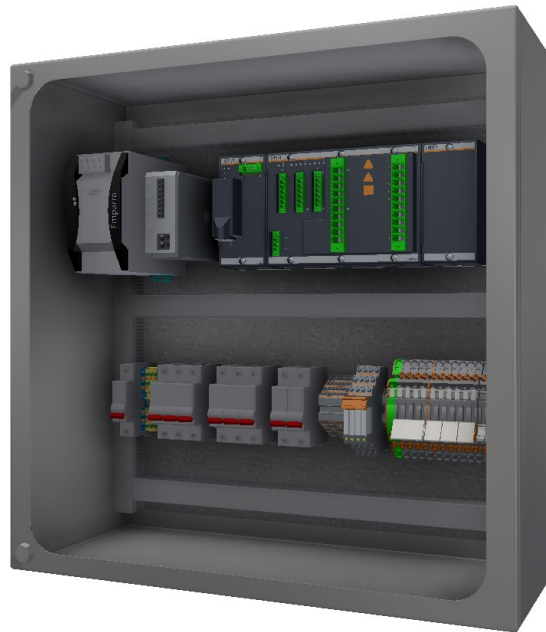
Integrated real-time data recorder

Event logging

4Q energy counter

Flexible I/O Configuration

Optional Enclosure with  
Transparent or Stainless Door



Certified Grid Protection Device

System protection

Grid synchronisation

Circuit breaker control

Precise limit value monitoring

Highspeed Interface to IDT EMS

High-accuracy power  
measurement

### Key features:

proven all-in-one system design  
compliant with multiple regulations and standards  
for outdoor, indoor and cabinet use  
leading control and communication technologies  
comfortable installation, maintenance and use  
easy system integration

### Functions:

power measurement  
power quality monitoring  
grid and system protection  
seamless synchronization and switching between grid and  
island mode (version IDT GMB-S)

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## "BRICK" IDT-Energy Management System Hardware

### Technical data

System Type	IDT GMB	IDT GMB-S
<b>AC connection</b>		
Nominal AC Power	240 W	
AC nominal voltage	230 V/ 110V, 1~	
Grid frequency	50 Hz / 60 Hz	
AC operating current	1 A	
AC maximum current	3 A	
<b>DC connection</b>		
Backup battery option	24 VDC	
<b>General data</b>		
Enclosure material	Stainless steel	
Enclosure door material	Stainless steel, optional polycarbonate window	
Dimensions W x H x D	500 x 500 x 210 mm	
Mounting plate material	Zinc-coated steel	
Mounting plate dimensions W x H x D	450 x 470 x 2,5 mm	
Weight	30 kg	
Cooling / Heating	natural convection	
Relative humidity	0% to 100%	
Operation temperature	-30°C ... +60°C	
Ingress protection	IP65	
<b>Measurements</b>		
Voltage	3 x UL-L up to 690 V, UL-N up to 400 V higher voltages via voltage transducers	7 x UL-L up to 480 V, UL-N up to 277 V, higher voltages via voltage transducers
Current	3 x via 5 A current transformers, 1 A optional	4 x via 5 A current transformers
Frequency	50 Hz / 60 Hz (10 Hz to 75 Hz, accuracy <0.001Hz), ROCOF	50 Hz / 60 Hz (10Hz to 75Hz, accuracy <0.004Hz), ROCOF
Phase	Phase angles, asymmetry, field rotation direction	
Power	P, Q, S per phase and total	
Power Quality	THD, voltage and current harmonics up to 50th harmonic	
Energy	2x 4Q energy meters	1x 4Q energy meter
<b>Interfaces</b>		
IDT EMS	Fastbus (up to 2000 m distance)	
Voltage Measurement	3 x grid	7 x (3 x grid, 3 x unit, 1 x busbar)
Current Measurement	3 x (L1, L2, L3)	4 x (L1, L2, L3, N)
Digital inputs (switch position)	-	4 (2 for each CB)
Digital outputs (synchronization)	-	4
Relay outputs (grid protection)	2 changeover contacts for circuit breaker	
<b>Standards, Certificates, Approvals</b>		
Grid codes	VDE AR 4105, VDE AR 4110, VDE AR 4120, EN50549	
EMC	IEC 61000	
Components	IEC/CE/UL	

Technical data are subject to change, even for reasons on country-specific deviations. Indrivetec assumes no liability for errors and omissions.

