

POWER STORAGE DC 8.0 | 10.0

DC-COUPLED HYBRID INVERTER FOR RESIDENTIAL AND COMMERCIAL PV SYSTEMS









HIGH EFFICIENCY

- Two independent MPP-trackers, switchable to parallel mode
- European efficiency > 98 %
- Input for high voltage battery
- Suitable for dynamic power adjustment
- Intelligent energy storage management with forecast based charging
- Exact and fast control behaviour

UNIQUE FLEXIBILITY

- 3-phase feed-in
- Wide MPP range for flexible string planning and easy repowering
- Max-Power Control self-learning shade management
- Cascadable, expandable and combinable with existing PV-systems
- Hybrid-ready charging of the battery also with external AC sources
- Emergency power capability in conjunction with the RCT Power Switch
- Simple design with the RCT Power Designer - design tool

EASY INSTALLATION

- DC and AC connection with plug & play
- Integrated RCT Power APP solution
- No Internet access required for setup



Technology and Design Made in Germany

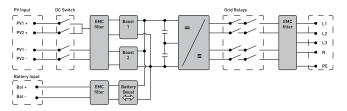
USER FRIENDLY COMMUNICATION

- Multi-information LCD-display
- LAN and WLAN
- RCT Power Portal for user-friendly system monitoring
- Multi-function communication board for connection of various devices
- Suitable for wallbox chargers, heating elements, heat pumps and energy management systems

INNOVATIVE DESIGN

- Silent, maintenance free cooling
- Durable aluminium housing
- With 32 kg a lightweight in its category
- IP42 protection: Suitable for indoor installation

BLOCK DIAGRAM





POWER STORAGE DC

DC INPUT

Max. recommended DC power (South / East-West) ¹⁾	10,8 kW / 12 kW	13,5 kW / 15 kW
MPPT	2 (paralleling possible)	
nput per MPPT	1	
Naximum DC current per MPPT	14 A (28 A in parallel mode)	
/lax. Short circuit current PV input (Iscmax)	18 A (36 A in parallel mode)	
Rated DC voltage	700 V	
OC start up voltage / power	150 V / 40 W	
OC voltage range	140 V 1000 V	
/IPP voltage range	380 V 800 V	
/laximum Voltage DC	1000 V	
Connector type	Weidmüller PV-Stick (MC4 compatible)	
BATTERY INPUT		
DC Voltage Range	120 V 600 V	
Aaximum charge / Discharge current	25 A / 25 A	
Connector-type	Weidmüller PV-Stick (MC4 compatible)	
AC OUTPUT (GRID-MODE)		
eal AC output power	8000 W	9900 W
laximum active power	8000 W	9900 W
faximum apparent power	10500 VA	10500 VA
Iominal AC current per phase	11,6 A	14,5 A
1aximum AC current per phase	15,2 A	15,2 A
ated frequency	50 Hz / 60 Hz	
requency range	45 Hz 65 Hz	
fax. switch-on current	15,2 A, 0,1ms	
fax. fault current (RMS)	285 mA	
ated AC voltage	230V / 400 V (L1, L2, L3, N, PE)	
C voltage range	180 V 290 V	
otal harmonic distortion (THD)	< 2% at rated power	
leactive power factor (cos phi)	1 (adjustable range 0,8 cap0,8 ind)	
arth fault protection	RCD	
OC current injection	< 0,5% In	
Required phases, grid connections	3 (L1, L2, L3, N, PE)	
lumber of feed-in phases	3	
ype of AC connection	spring clamps	
PERFORMANCE		
Stand-by consumption with discharged battery storage ²⁾	6,0 W	
Aaximum efficiency (PV2AC)	98,60 %	98,60 %
European efficiency (PV2AC)	98,33 %	98,35 %
werage efficiency PV2AC ³⁾	97,78 %	97,89 %
verage efficiency PV2Bet ³⁾	98,00 %	98,00 %
verage efficiency AC2Bat ³	97,33 %	
werage enrolency AG2bat ?		
verage officiency Ret2AC 3		97,44 %
· · · · · · · · · · · · · · · · · · ·	97,36 %	97,44 % 97,48 %
verage delay time / settling time	97,36 % 0,1s / 0,4s	
verage delay time / settling time opology	97,36 %	
verage delay time / settling time opology)THERS	97,36 % 0,1s / 0,4s transformerless	
verage delay time / settling time opology)THERS	97,36 % 0,1s / 0,4s	
verage delay time / settling time opology DTHERS V - DC - switch	97,36 % 0,1s / 0,4s transformerless	
verage delay time / settling time opology DTHERS V - DC - switch VC- / AC- overvoltage category	97,36 % 0,1s / 0,4s transformerless integrated	97,48 %
Average delay time / settling time Topology DTHERS VV-DC- switch DC- / AC- overvoltage category Data interface	97,36 % 0,1s / 0,4s transformerless integrated II / III	97,48 %
verage delay time / settling time opology DTHERS V - DC - switch VC - / AC- overvoltage category vata interface visplay cooling	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry	97,48 %
verage delay time / settling time opology DTHERS V - DC - switch VC - / AC- overvoltage category vata interface visplay cooling	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry LCD dot matrix 128 x 64 with backlight	97,48 %
Verage delay time / settling time opology DTHERS V - DC - switch VC - / AC- overvoltage category vata interface visplay cooling P degree of protection	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry LCD dot matrix 128 x 64 with backlight convection	97,48 %
verage delay time / settling time opology DTHERS V - DC - switch C- / AC- overvoltage category ata interface isplay cooling P degree of protection Max. operating altitude	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry LCD dot matrix 128 x 64 with backlight convection IP 42	97,48 %
verage delay time / settling time opology DTHERS V - DC - switch C- / AC- overvoltage category ata interface isplay cooling P degree of protection Max. operating altitude Max. relative humidity	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry LCD dot matrix 128 x 64 with backlight convection IP 42 2000 m	97,48 %
verage delay time / settling time opology DTHERS V - DC - switch VC - / AC- overvoltage category ata interface Display cooling D degree of protection Max. operating altitude Max. relative humidity Spical noise	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry LCD dot matrix 128 x 64 with backlight convection IP 42 2000 m 5 - 85 % (non condensing)	97,48 %
Verage delay time / settling time opology DTHERS V - DC - switch VC - / AC- overvoltage category ata interface visplay cooling D degree of protection Max. operating altitude Max. relative humidity ypical noise Operating temperature range	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry LCD dot matrix 128 x 64 with backlight convection IP 42 2000 m 5 - 85 % (non condensing) < 35 dB	97,48 %
Average delay time / settling time Topology DTHERS PV - DC - switch DC - / AC- overvoltage category Data interface Display Cooling P degree of protection Max. operating altitude Max. relative humidity Ypical noise Departing temperature range Dimensions (height x width x depth)	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry LCD dot matrix 128 x 64 with backlight convection IP 42 2000 m 5 - 85 % (non condensing) < 35 dB -25°C 60°C (40°C at full load)	97,48 %
Average delay time / settling time opology DTHERS VV-DC - switch VC- / AC- overvoltage category tata interface visplay cooling P degree of protection Max. operating altitude Max. relative humidity ypical noise Uperating temperature range vimensions (height x width x depth) Veight	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry LCD dot matrix 128 x 64 with backlight convection IP 42 2000 m 5 - 85 % (non condensing) < 35 dB -25°C 60°C (40°C at full load) 570 x 585 x 200 mm	97,48 %
Average delay time / settling time Topology DTHERS DV-DC - switch DC- / AC- overvoltage category Data interface Display Dooling P degree of protection Max. operating altitude Max. relative humidity Typical noise Derating temperature range Dimensions (height x width x depth) Veight SAFETY / STANDARDS	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry LCD dot matrix 128 x 64 with backlight convection IP 42 2000 m 5 - 85 % (non condensing) < 35 dB -25°C 60°C (40°C at full load) 570 x 585 x 200 mm	97,48 %
werage delay time / settling time Topology DTHERS DV - DC - switch DC - / AC- overvoltage category Data interface Display Cooling P degree of protection Max. operating altitude Max. relative humidity Typical noise Operating temperature range Dimensions (height x width x depth) Veight SAFETY / STANDARDS Safety class	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry LCD dot matrix 128 x 64 with backlight convection IP 42 2000 m 5 - 85 % (non condensing) < 35 dB -25°C 60°C (40°C at full load) 570 x 585 x 200 mm 32 kg I	97,48 %
Average efficiency Bat2AC ³⁾ Average delay time / settling time Topology DTHERS PV - DC - switch DC - / AC- overvoltage category Data interface Display Cooling P degree of protection Max. operating altitude Max. relative humidity Typical noise Deprating temperature range Dimensions (height x width x depth) Veight SAFETY / STANDARDS Safety class Dverload behaviour	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry LCD dot matrix 128 x 64 with backlight convection IP 42 2000 m 5 - 85 % (non condensing) < 35 dB -25°C 60°C (40°C at full load) 570 x 585 x 200 mm 32 kg I working point adjustment	97,48 %
Average delay time / settling time Topology DTHERS DV - DC - switch DC - / AC- overvoltage category Data interface Display Cooling P degree of protection Max. operating altitude Max. relative humidity Typical noise Dperating temperature range Dimensions (height x width x depth) Veight SAFETY / STANDARDS Safety class Dverload behaviour Certificates	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry LCD dot matrix 128 x 64 with backlight convection IP 42 2000 m 5 - 85 % (non condensing) < 35 dB -25°C 60°C (40°C at full load) 570 x 585 x 200 mm 32 kg I working point adjustment CE, VDE-AR-N 4105:2018-11, EN 50549	97,48 % contact, 4 x digital in, 2 x digital in/out
werage delay time / settling time Topology DTHERS DV - DC - switch DC - / AC- overvoltage category Data interface Display Dooling P degree of protection Max. operating altitude Max. relative humidity Typical noise Operating temperature range Dimensions (height x width x depth) Veight SAFETY / STANDARDS Safety class Dverload behaviour	97,36 % 0,1s / 0,4s transformerless integrated II / III WLAN, LAN, RS485, multifunctional dry LCD dot matrix 128 x 64 with backlight convection IP 42 2000 m 5 - 85 % (non condensing) < 35 dB -25°C 60°C (40°C at full load) 570 x 585 x 200 mm 32 kg I working point adjustment	97,48 % contact, 4 x digital in, 2 x digital in/out



¹⁾ Depending on orientation, inclination and location of installation.
 ²⁾ Average efficiencies in combination with a RCT Power Battery 11.5 and UmppNenn
 ³⁾ Measurement results according to efficiency guidelines for RCT Power Storage 6.0 with RCT Power Battery 11.5

