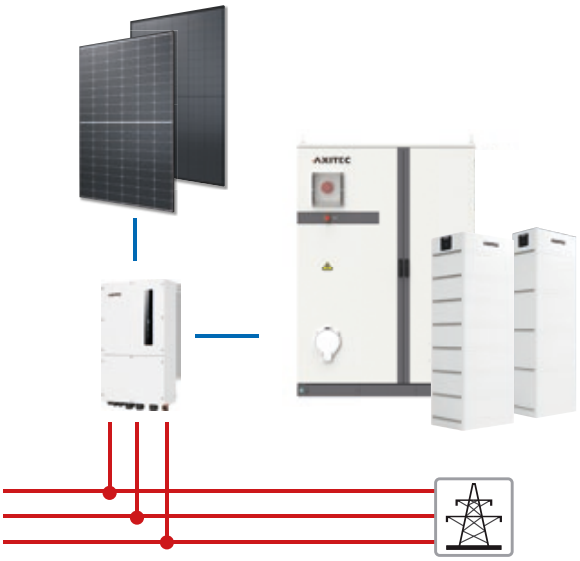
AXIhycon 29.9H - 50H
29.9 kW / 40 kW / 50 kW

PV Hybrid Inverter
compatible with AXIstorage Li SV1 / SV2 / SV3 and Titan

Advantages:

- Up to 4 MPP-trackers / 8 Strings for individual design of the PV system
- Up to maximum 20 A input current and 30 A short circuit current
- Maximum charge / discharge current of up to 70 A + 70 A / 140 A
- UPS reaction time < 10 ms
- Supports Peak Shaving Mode
- Generator connection
- 10 years warranty





AXIhyconEN250918

AXIhycon 29.9H - 50H

Electrical Data

Models	29.9H	40H	50H
Input DC (PV)			
Recommended PV power	20 – 42 kWp	30 – 56 kWp	40 – 70 kWp
Max. PV power	60 kWp	80 kWp	100 kWp
Max. input voltage		1000 V	
Rated voltage		600 V	
Start-up voltage		180 V	
MPPT voltage range		150 - 850 V	
Max. input current	3*40 A	4*40 A	4*40 A
Max. short circuit current	3*60 A	4*60 A	4*60 A
MPPT nr. / Max. input strings nr.	3 / 6	4 / 8	4 / 8
Input DC (Battery)			
Battery type		Lithium Iron Phosphate (LFP)	
Battery voltage range		150-800 V	
Max. charge / discharge power	29.9 kW	44 kW	55 kW
Max. charge / discharge current		70 A*2	
Communication		CAN/RS485	
Output AC (Grid)			
Rated output power	29.9 kW	40 kW	50 kW
Max. apparent output power	29.9 kVA	40 kVA	50 kVA
Rated grid voltage		3/N/PE, 380 V	
Rated grid frequency		50 Hz	
Rated grid output current	45.4 A	60.8 A	67 A
Max. output current	45.4 A	60.8 A	67 A
Power factor		> 0.99 / 0.8 leading - 0.8 lagging	
THDi		< 3 %	
Output AC (Back-up)			
Rated output power	29.9 kW	40 kW	50 kW
Max. apparent output powe	47.8 kVA, 2 s	64 kVA, 2 s	80 kVA, 2 s
Back-up switch time		< 10 ms	
Rated output voltage		3/N/PE, 380 V	
Rated frequency		50 Hz	
Rated output current	45.4 A	60.8 A	76 A
THDv (linear load)		< 2 %	
Efficiency			
Max. efficiency		97.6 %	
EU efficiency		97.0 %	
BAT charged by PV Max. efficiency		98.5 %	
BAT charged /discharged to AC Max. efficiency		97.5 %	

Protection

- Anti-Islanding
- Output over current protection
- Short circuit protection
- Integrated AFCI (Activation required)
- Integrated DC switch
- DC polarity protection
- PV overvoltage protection type II
- Battery reverse protection

General Data

Dimensions (W x H x D)	530 x 880 x 290 mm
Weight	73 kg
Topology	transformerless
Self-consumption (night)	< 25 W
Operating ambient temp. range	- 25 ~ + 60°C
Ingress protection	IP66
Cooling	Smart Cooling
Max. operation altitude	4000 m
Noise emission	< 65 dB

Grid connection standard

G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, RD 1699 / RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA

Safety / EMC standard

IEC / EN 62109-1/-2, IEC / EN 61000-6-1/-3

Features

DC connection	MC4 connector
Battery connnection	OT-Terminal
AC connection	OT-Terminal
Display	LED + Bluetooth + APP
Communication	CAN, RS485, Wi-Fi, LAN

Delivery

- Hybrid Inverter
- Wi-Fi / LAN - Data Logger
- Smart Meter / Eastron SDM630MCT

Compatible EMS

- Smart Fox
- Clever-PV
- Plexlog

Technical data are subject to change without prior notice, errors excepted. The measurement tolerances are +/-3%. Please be aware: All technical data provided in our data sheets are property of Axitec Energy GmbH & Co. KG and intended for information purposes for our customers only. We cannot accept any guarantee of completeness or accuracy. These data are prohibited for any kind of commercial use.