ASW UT-G3 Series



Models: ASW18K-UT-G3 ASW20K-UT-G3 ASW25K-UT-G3



Easy-to-install

- Quick & easy-to-install with basic tools
- Quick setup and commissioning with Solplanet apps
- Compact wall mount design



Reliable

- International quality standards
- 150 % PV array oversizing for higher vields
- IP66 rated design for outdoor use



User-Friendly

- Max 32 A MPPT input current, ideal for bifacial and large area PV modules
- 3 MPPT's for flexible PV array design
- ShadeSol shadow management





Rated active power	Te	chnical Datasheet	ASW18K-UT-G3	ASW20K-UT-G3	ASW25K-UT-G3
Min. injor voltage range / rated input voltage 180 V to 650 V / 360 V Min. injor voltage 160 V to 650 V / 360 V Min. injor voltage 160 V to 650 V / 360 V Min. injor voltage 200 V 2000		Max. PV array power	27000 Wp STC	30000 Wp STC	37500 Wp STC
Min. Input voltage 160 V 161 Min. Input voltage 200 V 161 Min. Input voltage 200 V 161 Min. Input voltage 200 V 200 V 200 Min. Separating input current 32 A 732 A 732 A 24	Input (DC)	Max. input voltage	800 V		
Max. potput current		MPP voltage range / rated input voltage	180 V to 650 V / 360 V		
Max. operating input current Max. operating input current Max. ober circuit current No. of independent MIPPT inputs / strings per MIPPT input Reted active power Max. apparent power Max. apparent power Max. apparent power Max. apparent power Max. operating input current Max. apparent power Max. apparent power Max. apparent power AC meminal voltage Max. output current AC grid frequency / range AC grid frequency / range Max. output current AC grid frequency / range AC grid frequency / range AC grid frequency / range AC grid frequency / strings per MIPPT input AC grid frequency / range AC grid frequency /		Min. input voltage	160 V		
Rated active power		Initial. feed-in voltage	200 V		
Rated active power		Max. operating input current	32 A / 32 A / 32 A		
Rated active power		Max. short circuit current	48 A / 48 A / 48A		
Max active power		No. of independent MPPT inputs / strings per MPPT input	3 / A:2;B:2;C:2		
Max. apparent power		Rated active power	18000 W	20000 W	25000 W
AC nominal voltage		Max active power	18000 W@ 230V	20000 W@ 230V	25000 W@ 230V
AC grid frequency / range So Hz / 45 Hz - 55 Hz 60 Hz / 55 Hz - 65 Hz		Max. apparent power	18000 VA@ 230V	20000 VA@ 230V	25000VA@ 230V
AG and frequency / range 60 Hz / 65 Hz - 68 Hz	Output (AC)	AC nominal voltage	133 V / 230 V	133 V / 230 V	133 V / 230 V
Adjustable power factor range Adjustable power factor range Reed in phases Adjustable power factor range Adjustable power factor power p		AC grid frequency / range			
Max. efficiency / European efficiency DC Switch Ground fault monitoring / grid monitoring DC reverse polarity protection / AC short circuit protection All-pole-sensitive residual-current monitoring unit All-pole-sensitive residual-current monitoring unit All-pole-sensitive residual-current monitoring unit All-pole-sensitive residual-current monitoring unit Burge Protection Surge Protection Surge Protection Protection class (according to IEC 62109-1) / Overvoltage actegory (according to IEC 62109-1) Dimensions (W / H / D) Dimensions (W / H / D) S43 / 520 / 235 mm Weight Operating temperature range Self-consumption (at night) Topology Cooling concept Degree of protection (according to IEC 60529) Climatic category (according to IEC 60529) Dimensions (w / H / D) Degree of protection (according to IEC 60529) Climatic category (according to IEC 60529) Degree of protection (according to IEC 60529) Degree of protection (according to IEC 60529) Degree of protection (according to IEC 60529) Climatic category (according to IEC 60721-3-4) Max. permissible value for relative humidity (non-condensing) DC connection Plug-in connector Plug-in connector Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Overvious AC (Status / Fault / Communication) Communication interface¹ Country of manufacture China		Max. output current	45.2 A	50.2 A	62.8 A
Max. efficiency / European efficiency DC Switch Ground fault monitoring / grid monitoring DC reverse polarity protection / AC short circuit protection All-pole-sensitive residual-current monitoring unit All-pole-sensitive residual-current monitoring unit All-pole-sensitive residual-current monitoring unit All-pole-sensitive residual-current monitoring unit Burge Protection Surge Protection Surge Protection Protection class (according to IEC 62109-1) / Overvoltage actegory (according to IEC 62109-1) Dimensions (W / H / D) Dimensions (W / H / D) S43 / 520 / 235 mm Weight Operating temperature range Self-consumption (at night) Topology Cooling concept Degree of protection (according to IEC 60529) Climatic category (according to IEC 60529) Dimensions (w / H / D) Degree of protection (according to IEC 60529) Climatic category (according to IEC 60529) Degree of protection (according to IEC 60529) Degree of protection (according to IEC 60529) Degree of protection (according to IEC 60529) Climatic category (according to IEC 60721-3-4) Max. permissible value for relative humidity (non-condensing) DC connection Plug-in connector Plug-in connector Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Overvious AC (Status / Fault / Communication) Communication interface¹ Country of manufacture China		Adjustable power factor range	0.8 leading to 0.8 lagging		
Max. efficiency / European efficiency DC Switch Ground fault monitoring / grid monitoring DC reverse polarity protection / AC short circuit protection All-pole-sensitive residual-current monitoring unit All-pole-sensitive residual-current monitoring unit All-pole-sensitive residual-current monitoring unit All-pole-sensitive residual-current monitoring unit Burge Protection Surge Protection Surge Protection Protection class (according to IEC 62109-1) / Overvoltage actegory (according to IEC 62109-1) Dimensions (W / H / D) Dimensions (W / H / D) S43 / 520 / 235 mm Weight Operating temperature range Self-consumption (at night) Topology Cooling concept Degree of protection (according to IEC 60529) Climatic category (according to IEC 60529) Dimensions (w / H / D) Degree of protection (according to IEC 60529) Climatic category (according to IEC 60529) Degree of protection (according to IEC 60529) Degree of protection (according to IEC 60529) Degree of protection (according to IEC 60529) Climatic category (according to IEC 60721-3-4) Max. permissible value for relative humidity (non-condensing) DC connection Plug-in connector Plug-in connector Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Overvious AC (Status / Fault / Communication) Communication interface¹ Country of manufacture China		Feed-in phases	3/3-PE		
DC Switch Ground fault monitoring / grid monitoring DC reverse polarity protection / AC short circuit protection All-pole-sensitive residual-current monitoring unit All-pole-sensitive residual-current monitoring unit Att-islanding Protection Protection of the protection Protection class (according to IEC 62109-1) / overvoltage category (according to IEC 62109-1) Dimensions (W / H / D) Dimensions (W / H / D) S43 / 520 / 235 mm Weight Operating temperature range Self-consumption (at night) Topology Cooling concept Degree of protection (according to IEC 60529) Climatic category (according to IEC 60529) Climatic category (according to IEC 60529) Dimensions (W / H / D) Degree of protection (according to IEC 60529) Climatic category (according to IEC 60529) Degree of protection (according to IEC 60529) Degree of protection (according to IEC 60529) Climatic category (according to IEC 60721-3-4) Max. operating altitude DC connection Plug-in connector AC connection Plug-in connector Mounting type Usall-mount bracket LED Indicators (Status / Fault / Communication) Communication interface' Overvoltage at the protection of t		Harmonic distortion (THD) at rated output	< 3%		
Ground fault monitoring / grid monitoring	Features General data Efficiency & Protection	Max. efficiency / European efficiency	98.3% / 97.8%		
Surge Protection • / Type II Protection class (according to IEC 62109-1) /		DC Switch	•		
Surge Protection • / Type II Protection class (according to IEC 62109-1) /		Ground fault monitoring / grid monitoring	●/●		
Surge Protection • / Type II Protection class (according to IEC 62109-1) /		DC reverse polarity protection / AC short circuit protection	●/●		
Surge Protection • / Type II Protection class (according to IEC 62109-1) /		All-pole-sensitive residual-current monitoring unit	•		
Dimensions (W / H / D) Dimensions (W / H / D) Weight Operating temperature range Self-consumption (at night) Cooling concept Degree of protection (according to IEC 60529) Climatic category (according to IEC 60721-3-4) Max. permissible value for relative humidity (non-condensing) Max. operating altitude DC connection AC connection Plug-in connector Mounting type LED Indicators (Status / Fault / Communication) Communication interface' Country of manufacture Sala / 520 / 235 mm 30kg 30kg 30kg 30kg Cauchy (Cauchy (Cauchy Cauchy Cau		Anti-islanding Protection	•		
Dimensions (W / H / D) Dimensions (W / H / D) Weight Operating temperature range Self-consumption (at night) Cooling concept Degree of protection (according to IEC 60529) Climatic category (according to IEC 60721-3-4) Max. permissible value for relative humidity (non-condensing) Max. operating altitude DC connection AC connection Plug-in connector Mounting type LED Indicators (Status / Fault / Communication) Communication interface' Country of manufacture Sala / 520 / 235 mm 30kg 30kg 30kg 30kg Cauchy (Cauchy (Cauchy Cauchy Cau		Surge Protection	• / Type II		
Weight Operating temperature range Self-consumption (at night) Topology Cooling concept Active cooling Degree of protection (according to IEC 60529) Climatic category (according to IEC 60721-3-4) Max. permissible value for relative humidity (non-condensing) Max. operating altitude DC connection AC connection AC connection Plug-in connector Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Country of manufacture China 30kg -25°C +60°C -18W Non-isolated Active cooling IP66 Climatic category (according to IEC 60529) IP66 Active cooling IP66 Solf-consumption (at night)			I / AC: III; DC: II		
Operating temperature range Self-consumption (at night) Topology Cooling concept Degree of protection (according to IEC 60529) Climatic category (according to IEC 60721-3-4) Max. permissible value for relative humidity (non-condensing) Deconnection Deconnection Deconnection Plug-in connector Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Country of manufacture Operating temperature range -25°C +60°C 1W Annon-isolated Active cooling Ple6 1P66 1P66 200% Active cooling Ple6 100% Active cooling Ple7 AK4H Max. permissible value for relative humidity (non-condensing) 100% Max. operating altitude 3000 m Plug-in connector Wall-mount bracket LED Indicators (Status / Fault / Communication) Communication interface¹ Operating temperature range -25°C +60°C Active Active cooling Ple6 Wall-mount bracket Active cooling Plug-in connector Wall-mount bracket Communication interface¹ Operating temperature range -25°C +60°C Active Active cooling Ple6 Climatic category (according to IEC 60529) IP66 Climatic category (according to IEC 60721-3-4) IP66 Climatic category (according to IEC 60529) IP66 Climatic category (according to IEC 60721-3-4) IP66 Climatic category (according to IEC 60721-3-4) IP66 Climatic category (according to IEC 60721-3-4) IP66 Climatic category (according to		Dimensions (W / H / D)	543 / 520 / 235 mm		
Self-consumption (at night) Topology Cooling concept Degree of protection (according to IEC 60529) Climatic category (according to IEC 60721-3-4) Max. permissible value for relative humidity (non-condensing) Max. operating altitude DC connection AC connection AC connection Mounting type LED Indicators (Status / Fault / Communication) Communication interface! Country of manufacture Self-consumption (at night) Antive cooling IP66 Active cooling IP66 AK4H Max. Permissible value for relative humidity (non-condensing) 100% Plug-in connector Wall-mount bracket Communication interface! Communication interface! Contry of manufacture China		Weight	30kg		
Topology Cooling concept Active cooling Degree of protection (according to IEC 60529) Climatic category (according to IEC 60721-3-4) Max. permissible value for relative humidity (non-condensing) Max. operating altitude DC connection AC connection AC connection Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Country of manufacture Non-isolated Active cooling IP66 Active cooling IP66 AK4H Max. permissible value for relative humidity (non-condensing) 100% Max. operating altitude 3000 m Plug-in connector Plug-in connector Wall-mount bracket Communication interface¹ Ommunication interface¹ Country of manufacture China		Operating temperature range	-25°C +60°C		
Cooling concept Degree of protection (according to IEC 60529) Climatic category (according to IEC 60721-3-4) Max. permissible value for relative humidity (non-condensing) Max. operating altitude DC connection AC connection AC connection Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Country of manufacture Active cooling Active		Self-consumption (at night)	<1W		
Degree of protection (according to IEC 60529) Climatic category (according to IEC 60721-3-4) Max. permissible value for relative humidity (non-condensing) Max. operating altitude DC connection AC connection Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Country of manufacture Ple6 AK4H Max. permissible value for relative humidity (non-condensing) 100% Plug-in connector Wall-mount bracket China		Topology	Non-isolated		
Climatic category (according to IEC 60721-3-4) Max. permissible value for relative humidity (non-condensing) Max. operating altitude DC connection AC connection Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Country of manufacture Climatic category (according to IEC 60721-3-4) 4K4H 4K		Cooling concept	Active cooling		
DC connection AC connection Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Country of manufacture Plug-in connector Wall-mount bracket ### ### ### ### ### ### ### ### ### #		Degree of protection (according to IEC 60529)	IP66		
DC connection AC connection Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Country of manufacture Plug-in connector Wall-mount bracket ### ### ### ### ### ### ### ### ### #		Climatic category (according to IEC 60721-3-4)	4K4H		
DC connection AC connection Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Country of manufacture Plug-in connector Wall-mount bracket ### ### ### ### ### ### ### ### ### #		Max. permissible value for relative humidity (non-condensing)	100%		
AC connection Plug-in connector Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Country of manufacture Plug-in connector Wall-mount bracket		Max. operating altitude	3000 m		
Mounting type LED Indicators (Status / Fault / Communication) Communication interface¹ Country of manufacture Wall-mount bracket		DC connection	Plug-in connector		
LED Indicators (Status / Fault / Communication) Communication interface¹ Country of manufacture China		AC connection	Plug-in connector		
Communication interface¹ Country of manufacture Country of manufacture China		Mounting type	Wall-mount bracket		
Country of manufacture China		LED Indicators (Status / Fault / Communication)	•		
Country of manufacture China Certificates and approvals (more available on request) IEC 62109, IEC 61000-6, EN 62920, EN 50549-1		Communication interface ¹	●/●/●/O(RS485 / Wi-Fi / LAN / 4G)		
Certificates and approvals (more available on request) IEC 62109, IEC 61000-6, EN 62920, EN 50549-1		Country of manufacture			

[•] Standard features / O optional features / – not available

Data at nominal conditions. All information is subject to change.

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¹⁻Zero export installations supported with 2-pin RS485 for connection to approved smart meters