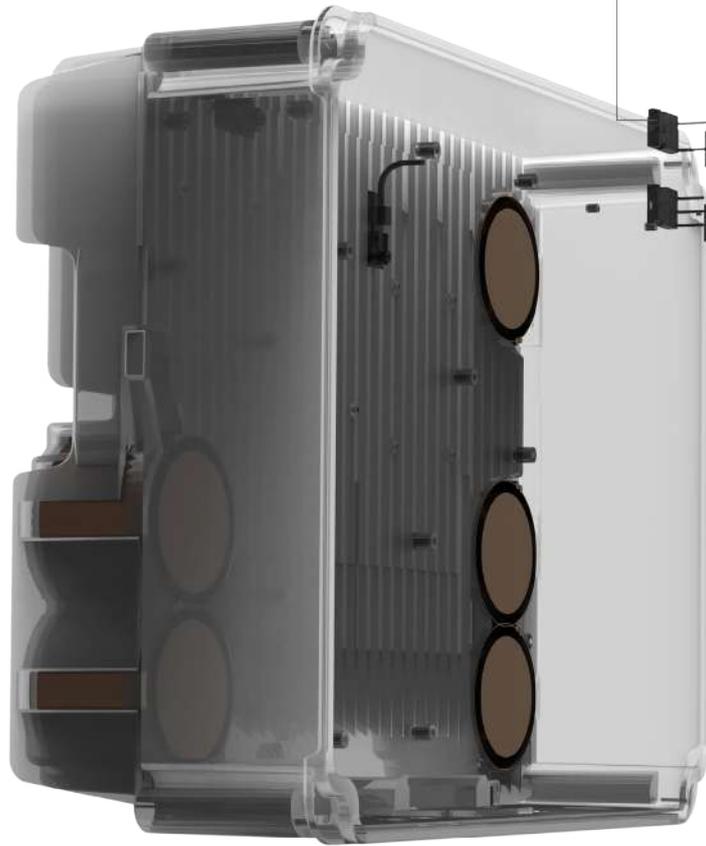




W-Hi

SERIES





CREE ⇄

CREE
SiC Diodes



ON / INFINEON
IGBT

 **LEM**

LEM
HCT



SANTON / GEIREN
DC Switch



STAUBLI
MC4 Connectors

Minebea
MINEBEA
Cooling Fan

muRata
INNOVATOR IN ELECTRONICS
MURATA
Ceramic Capacitors



NCC / JIANGHAI
Elcaps



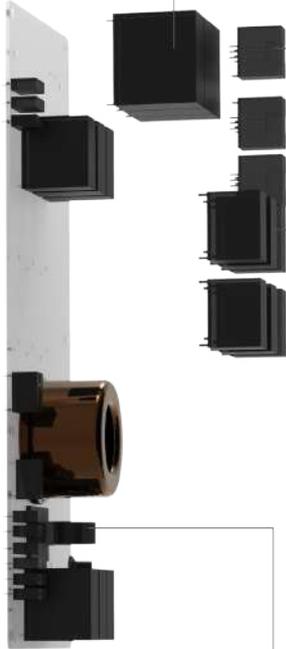
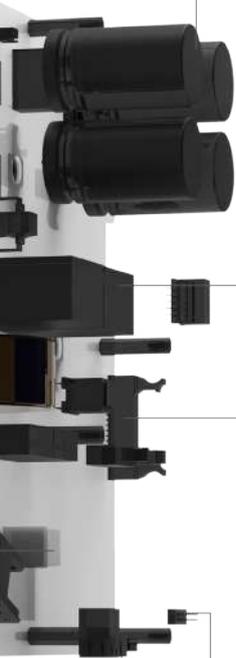
FARATRONICS
Film
Capacitors



FARATRONICS
Dual-85
Capacitors



LEM / TAMURA
Current Sensor



VISHAY
Melf
Resistors



TEXAS
INSTRUMENTS
DSP



OMRON
Connectors

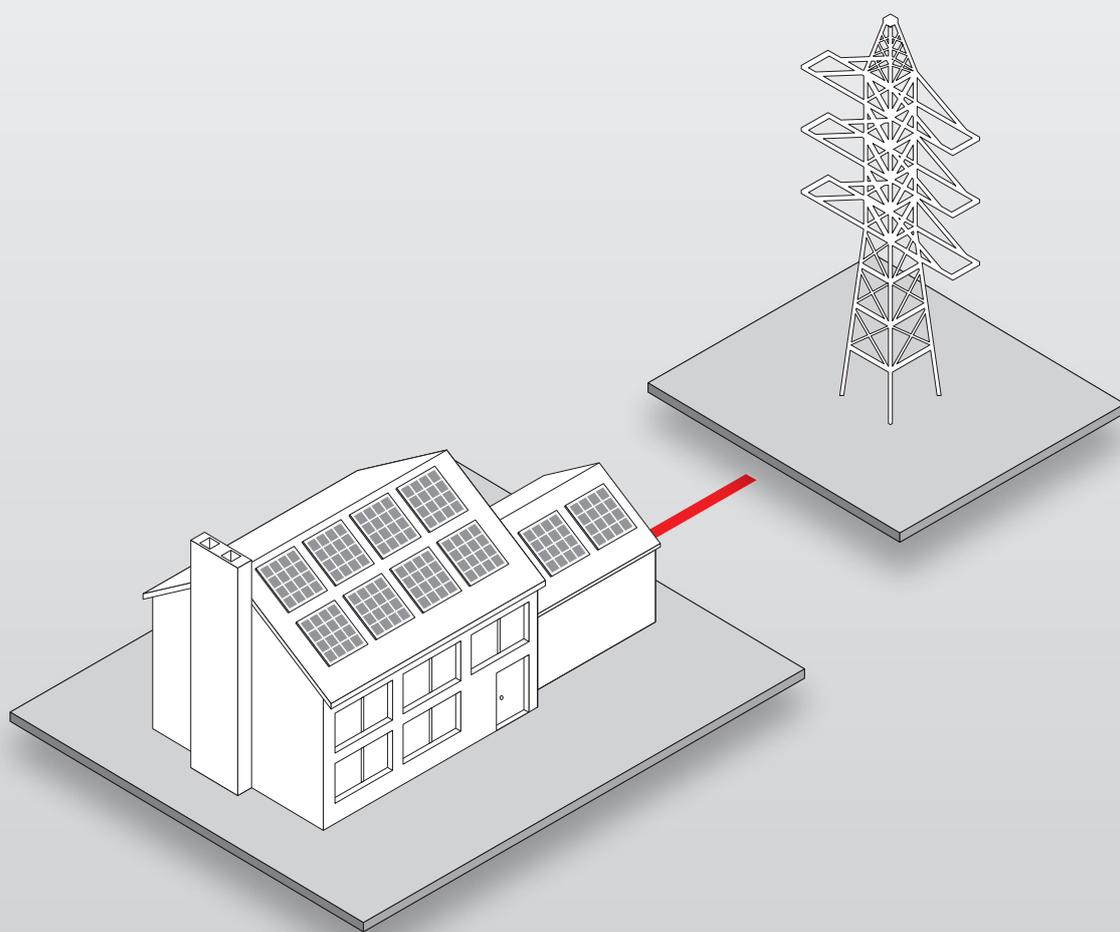


VAC
Inductor



FUJITSU / HF
Relay

W-Hi Series





W-HMS

Grid-Tied Microinverter

W-HMS | 600W-C

Grid-Tied Microinverter with 2 MPPTs



Features



10 Years
Warranty



IP67
Protection



Peak Efficiency
96.8%



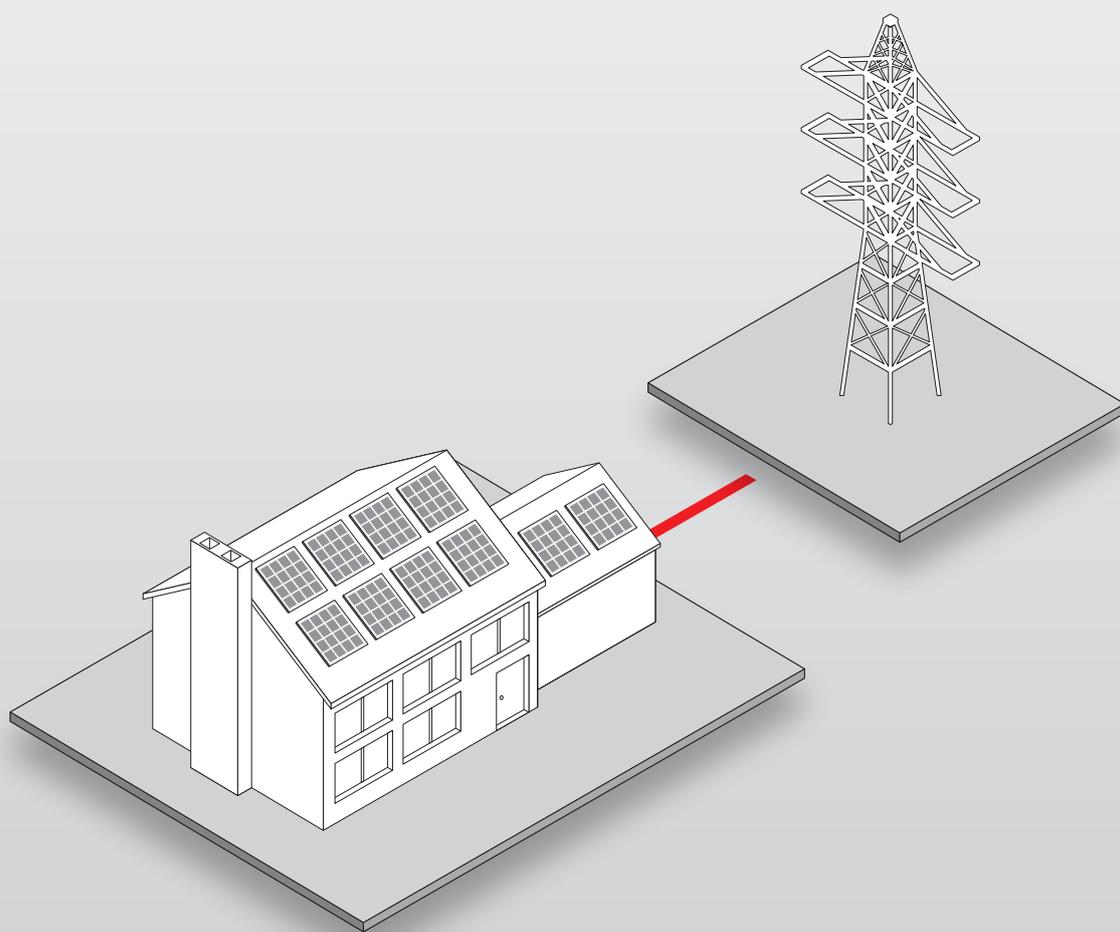
Easy to
Install and Service



Flexible & friendly

MODEL	W-HMS-600-C
PRODUCT CODE	018906
INPUT / DC	
Max. PV Power / Wp	320-450 (2 pcs)
Max. Input Voltage / V	60
MPP Voltage Range / V	25-55
Min. Input Voltage / V	25
Start Up Voltage / V	16
Max. Input Current / A	15
Max. DC Short Circuit Current / A	20
No. of Independent MPPT Inputs	2
No. of PV Strings per MPPT	1
OUTPUT / AC	
Rated Power / W	600
Rated Grid Voltage / Vac	220/230/240
Grid Connection	L-N-PE
Rated Power Frequency / Hz	50/60
Max. Output Current / A	2.7
Cosφ	0.8ind a 0.8cap
THDi @ Rated Power	<3%
EFFICIENCY	
Max. Efficiency	96.8%
Med. Efficiency	96.5%
MPPT Efficiency	>99.9%
PROTECTION FUNCTION	
Anti-Islanding Protection	Integrated
Input Reverse Polarity Protection	Integrated
Insulation Resistance Detection	Integrated
Residual Current Monitoring	Integrated
Output Over Current Protection	Integrated
Output Short Circuit Protection	Integrated
Over Voltage Protection	II (DC), III (AC)
Surge Protection	DC: Type II / AC: Type II
GENERAL DATA	
Dimensions (W*H*D) / mm	230*190*46.5
Weight / kg	3.4
Noise Emission (Typical) / dB(A)	20
User Interface	LED
DC Connection Type	MC4
AC Connection Type	Plug-in Connector included
Communication	Wi-Fi Included
Cooling Method	Natural Cooling
Operating Ambient Temperature / °C	-40 ~ +65
Relative Humidity	0% to 100%
Max. Operating Altitude / m	3000 (>3000 Derating)
Protection Class (IEC 60529)	IP67
Climatic Category (IEC 60721-3-4)	4K4H
Topology	High Frequency Isolated
Night Consumption / mW	<50

W-Hi Series





W-HPK | W-HPS

Single-Phase Grid-Tied Inverters

W-HPK | 1-3K

Single-Phase Grid-Tied with 1 MPPT

Integrated monitoring
with *my Leonardo*
web portal and app



Features



10 Years
Warranty



Aluminum Alloy
Die Casting



Max. DC Overload
50%



Peak Efficiency
97.6%



Easy to
Install and Service



Light
and Compact

Block Diagram



MODEL	W-HPK-1K	W-HPK-1.5K	W-HPK-2K	W-HPK-2.5K	W-HPK-3K
PRODUCT CODE	017761	017762	017763	017727	017637
INPUT / DC					
Max. PV Power / Wp	1650	2475	3300	3750	4500
Max. Input Voltage / V	500				
MPP Voltage Range / V	50~450				
Min. Input Voltage / V	42				
Start Up Voltage / V	70				
Nominal DC-Input Voltage / V	360				
Max. Input Current / A	13				
Max. DC Short Circuit Current / A	15.6				
No. of Independent MPPT Inputs	1				
No. of PV Strings per MPPT	1				
OUTPUT / AC					
Rated Power / W	1000	1500	2000	2500	3000
Max. Apparent AC Power / VA	1100	1650	2200	2750	3300
Rated Grid Voltage / Vac	220/230/240				
Rated Power Frequency / Hz	50/60				
Max. Output Current / A	5	7,5	10	12	13,8
Cosφ	0.8ind to 0.8cap				
THDi @ Rated Power	<3%				
EFFICIENCY					
Max. Efficiency	97.2%	97.3%	97.3%	97.6%	97.6%
Med. Efficiency	96.4%	96.6%	96.6%	97.0%	97.0%
PROTECTION FUNCTION					
Anti-Islanding Protection	Integrated				
Input Reverse Polarity Protection	Integrated				
Insulation Resistance Detection	Integrated				
Residual Current Monitoring	Integrated				
Output Over Current Protection	Integrated				
Output Short Circuit Protection	Integrated				
Output Over Voltage Protection	II (DC), III (AC)				
Surge Protection	DC: Optional / AC: Type II				
GENERAL DATA					
Dimensions (W*H*D) / mm	298*220*111	298*220*111	298*220*111	298*220*116	298*220*116
Weight / kg	4.5	4.5	4.5	4.8	4.8
Noise Emission (Typical) / dB(A)	<20				
User Interface	LCD & LED or LED				
DC Connection Type	MC4				
AC Connection Type	Plug-in Connector Included				
Communication	Wi-Fi Stick Included				
Cooling Method	Fanless				
Operating Ambient Temperature / °C	-25 - +60				
Allowable Relative Humidity Range	0% to 100%				
Max. Operating Altitude / m	3000 (>3000 Derating)				
Degree of Protection (IEC 60529)	IP65				
Climatic Category (IEC 60721-3-4)	4K4H				
Topology	Transformerless				
Stand-by Consumption / W	<1				

W-HPS | 3-6K

Single-Phase Grid-Tied with 2 MPPTs

Integrated monitoring
with *my Leonardo*
web portal and app



Features



10 Years
Warranty



Aluminum Alloy
Die Casting



Max. DC Overload
40%



Peak Efficiency
98%



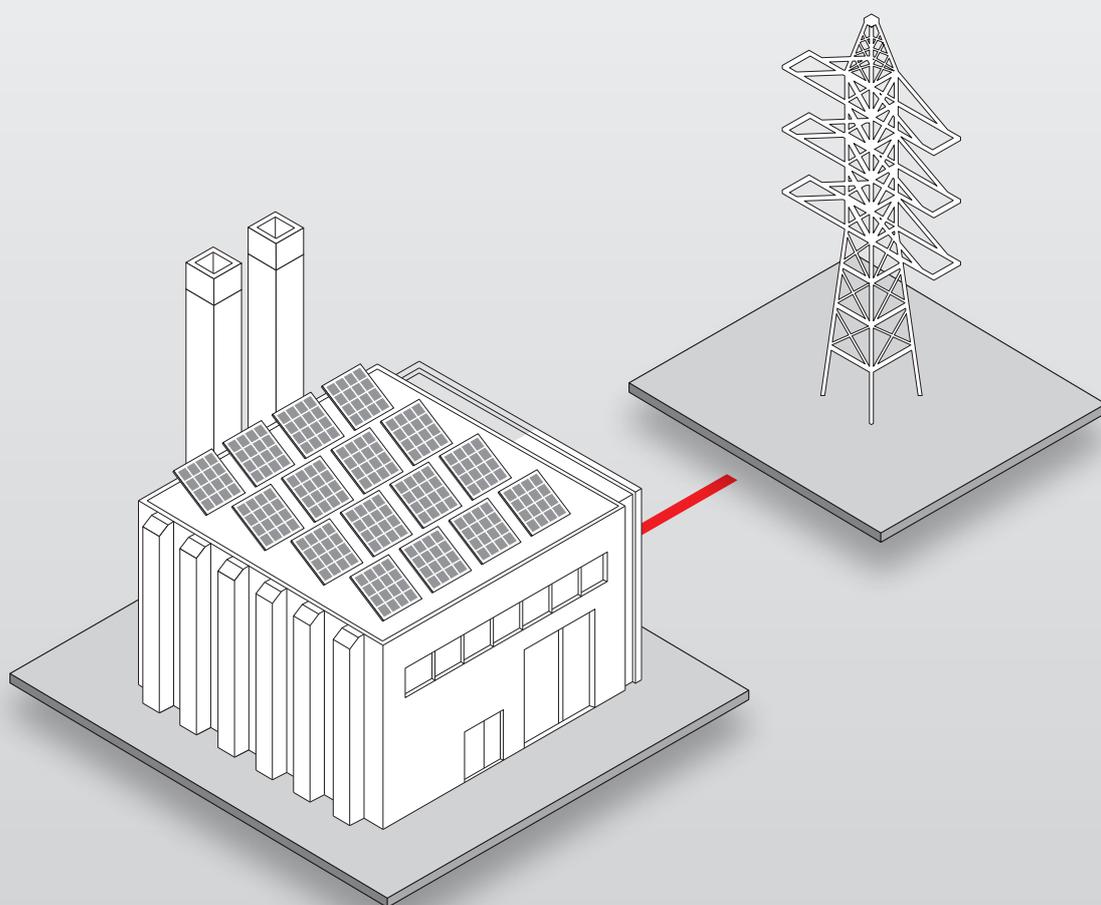
Easy to
Install and Service

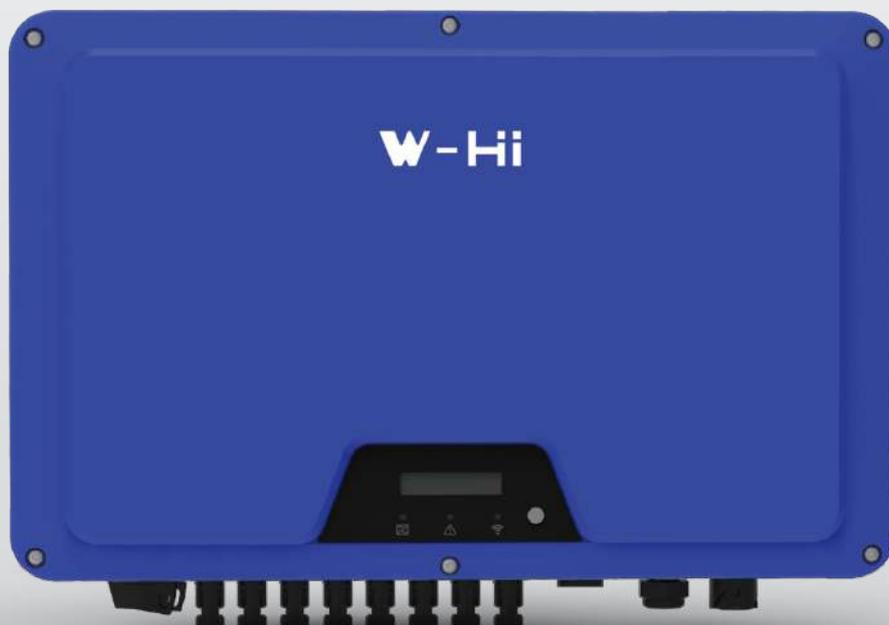
Block Diagram



MODEL	W-HPS-3K	W-HPS-3.68K	W-HPS-4K	W-HPS-5K	W-HPS-6K
PRODUCT CODE	017728	017764	017765	017766	017767
INPUT / DC					
Max. PV Power / Wp	5152	5152	6160	7000	7800
Max. Input Voltage / V	600				
MPP Voltage Range / V	80-520	80-520	80-520	80-520	80-550
Min. Input Voltage / V	76				
Start Up Voltage / V	125				
Nominal DC-Input Voltage / V	360	360	360	360	360
Max. Input Current / A	13				
Max. DC Short Circuit Current / A	15				
No. of Independent MPPT Inputs	2				
No. of PV Strings per MPPT	1				
OUTPUT / AC					
Rated Power / W	3000	3680	4000	5000	6000
Max. Apparent AC Power / VA	3300	3680	4400	5000	6000
Rated Grid Voltage / Vac	220/230/240				
Rated Power Frequency / Hz	50/60				
Max. Output Current / A	15	16	20	23	27,3
Cosφ	0.8ind to 0.8cap				
THDi @ Rated Power	<3%				
EFFICIENCY					
Max. Efficiency	97.8%	97.9%	97.9%	97.9%	98.0%
Med. Efficiency	97.3%	97.4%	97.4%	97.4%	97.5%
PROTECTION FUNCTION					
Anti-Islanding Protection	Integrated				
Input Reverse Polarity Protection	Integrated				
Insulation Resistance Detection	Integrated				
Residual Current Monitoring	Integrated				
Output Over Current Protection	Integrated				
Output Short Circuit Protection	Integrated				
Output Over Voltage Protection	II (DC), III (AC)				
Surge Protection	DC: Optional / AC: Type II				
GENERAL DATA					
Dimensions (W*H*D) / mm	395*328*154				
Weight / kg	9.8	9.8	9.8	9.8	10
Noise Emission (Typical) / dB(A)	<20				
User Interface	LCD & LED or LED				
DC Connection Type	MC4				
AC Connection Type	Plug-in Connector Included				
Communication	Stick Wi-Fi Included				
Cooling Method	Fanless				
Operating Ambient Temperature / °C	-25 - +60				
Allowable Relative Humidity Range	0% to 100%				
Max. Operating Altitude / m	3000 (>3000 Derating)				
Degree of Protection (IEC 60529)	IP65				
Climatic Category (IEC 60721-3-4)	4K4H				
Topology	Transformerless				
Stand-by Consumption / W	<1				

W-Hi Series





W-HPT

Three-Phase Grid-Tied Inverters

W-HPT | 3-10K

Three-Phase Grid-Tied with 2 MPPTs



Integrated monitoring with *my Leonardo* web portal and app



Features



10 Years Warranty



Aluminum Alloy Die Casting



Max. DC Overload 50%



Peak Efficiency 98.2%



Easy to Install and Service

Block Diagram



MODEL	W-HPT-3K	W-HPT-4K	W-HPT-5K	W-HPT-6K	W-HPT-8K	W-HPT-10K
PRODUCT CODE	017729	017730	017731	017732	017733	017734
INPUT / DC						
Max. PV Power / Wp	4620	6160	7700	8400	11500	13000
Max. Input Voltage / V	1000					
MPP Voltage Range / V	150-850					
Min. Input Voltage / V	150					
Start Up Voltage / V	180					
Full Load MPP Voltage Range / V	210-850	210-850	210-850	250-850	330-850	410-850
Nominal DC-Input Voltage / V	620					
Max. Input Current / A	13					
Max. DC Short Circuit Current / A	15.6					
No. of Independent MPPT Inputs	2					
No. of PV Strings per MPPT	1					
OUTPUT / AC						
Rated Power / W	3000	4000	5000	6000	8000	10000
Max. Apparent AC Power / VA	3300	4400	5500	6000	8800	10000
Rated Grid Voltage / Vac	380/400					
Grid Connection	3L-N-PE					
Rated Power Frequency / Hz	50/60					
Max. Output Current / A	5	6.5	8.5	9	13	15.2
Cosφ	0.8ind to 0.8cap					
THDi @ Rated Power	<3%					
EFFICIENCY						
Max. Efficiency	98.0%	98.0%	98.1%	98.1%	98.2%	98.2%
Med. Efficiency	97.4%	97.4%	97.4%	97.4%	97.5%	97.5%
PROTECTION FUNCTION						
Anti-Islanding Protection	Integrated					
Input Reverse Polarity Protection	Integrated					
Insulation Resistance Detection	Integrated					
Residual Current Monitoring	Integrated					
Output Over Current Protection	Integrated					
Output Short Circuit Protection	Integrated					
Output Over Voltage Protection	II (DC), III (AC)					
Surge Protection	DC: Optional / AC: Type II					
GENERAL DATA						
Dimensions (W*H*D) / mm	425*351*160					
Weight / kg	13.7	13.7	13.7	13.7	14	14
Noise Emission (Typical) / dB(A)	<20	<20	<20	<20	<25	<25
User Interface	LCD & LED or LED					
DC Connection Type	MC4	MC4	MC4	MC4	MC4 (SUNCLIX, H4 optional)	MC4 (SUNCLIX, H4 optional)
AC Connection Type	Plug-in Connector included					
Communication	Wi-Fi Stick included					
Cooling Method	Fanless					
Operating Ambient Temperature / °C	-25- +60					
Allowable Relative Humidity Range	0% to 100%					
Max. Operating Altitude / m	2000 (>2000 Derating)					
Degree of Protection (IEC 60529)	IP65					
Climatic Category (IEC 60721-3-4)	4K4H					
Topology	Transformerless					
Stand-by Consumption / W	<1					

W-HPT | 15-25K

Three-Phase Grid-Tied with 2 MPPTs



Integrated monitoring with *my Leonardo* web portal and app



Features



10 Years Warranty



Aluminum Alloy Die Casting



Max. DC Overload 50%



Peak Efficiency 98.6%



Easy to Install and Service

Block Diagram



MODEL	W-HPT-15K	W-HPT-20K	W-HPT-25K
PRODUCT CODE	017735	017736	017737
INPUT / DC			
Max. PV Power / Wp	22500	30000	30000
Max. Input Voltage / V		1000	
MPP Voltage Range / V		150-900	
Min. Input Voltage / V		150	
Start Up Voltage / V		180	
Full Load MPP Voltage Range / V	330-900	430-900	500-900
Nominal DC-Input Voltage / V		620	
Max. Input Current / A		26	
Max. DC Short Circuit Current / A		40	
No. of Independent MPPT Inputs		2	
No. of PV Strings per MPPT		2	
OUTPUT / AC			
Rated Power / W	15000	20000	25000
Max. Apparent AC Power / VA	16500	22000	25000
Rated Grid Voltage / Vac		380/400	
Grid Connection		3L-N-PE	
Rated Power Frequency / Hz		50/60	
Max. Output Current / A	24	31.9	36.3
Cosφ		0.8ind to 0.8cap	
THDi @ Rated Power		<3%	
EFFICIENCY			
Max. Efficiency		98.6%	
Med. Efficiency		98.2%	
PROTECTION FUNCTION			
Anti-Islanding Protection		Integrated	
Input Reverse Polarity Protection		Integrated	
Insulation Resistance Detection		Integrated	
Residual Current Monitoring		Integrated	
Output Over Current Protection		Integrated	
Output Short Circuit Protection		Integrated	
Output Over Voltage Protection		II (DC), III (AC)	
Surge Protection		DC: Optional / AC: Type II	
GENERAL DATA			
Dimensions (W*H*D) / mm		425*351*200	
Weight / kg		20	
Noise Emission (Typical) / dB(A)		<45	
User Interface		LCD & LED or LED	
DC Connection Type		MC4	
AC Connection Type		Plug-in Connector Included	
Communication		Wi-Fi Stick Included	
Cooling Method		Smart Fan Cooling	
Operating Ambient Temperature / °C		-25 - +60	
Allowable Relative Humidity Range		0% to 100%	
Max. Operating Altitude / m		2000 (>2000 Derating)	
Degree of Protection (IEC 60529)		IP65	
Climatic Category (IEC 60721-3-4)		4K4H	
Topology		Transformerless	
Stand-by Consumption / W		<1	

W-HPT | 30-50K

Three-Phase Grid-Tied with 4 MPPTs



Integrated monitoring with *my Leonardo* web portal and app



Features



10 Years Warranty



Aluminum Alloy Die Casting



Max. DC Overload 50%



Peak Efficiency 98.8%



Easy to Install and Service

Block Diagram



MODEL	W-HPT-30K	W-HPT-33K	W-HPT-36K	W-HPT-40K	W-HPT-50K
PRODUCT CODE	018251	018252	018253	018254	018255
INPUT / DC					
Max. PV Power / Wp	49500	49500	54000	60000	65000
Max. Input Voltage / V	1100				
MPP Voltage Range / V	150-1000				
Min. Input Voltage / V	150				
Start Up Voltage / V	150				
Full Load MPP Voltage Range / V	330-900	330-900	380-900	430-900	500-900
Nominal DC-Input Voltage / V	620				
Max. Input Current / A	30 x 3	30 x 3	30 x 3	30 x 4	30 x 4
Max. DC Short Circuit Current / A	45 x 3	45 x 3	45 x 3	45 x 4	45 x 4
No. of Independent MPPT Inputs	3	3	3	4	4
No. of PV Strings per MPPT	2				
OUTPUT / AC					
Rated Power / W	30000	33000	36000	40000	50000
Max. Apparent AC Power / VA	33000	36300	39600	44000	55000
Rated Grid Voltage / Vac	380/400				
Grid Connction	3L-N-PE or 3L-PE (if "AC Output T" on the display is set to 400V)				
Rated Power Frequency / Hz	50/60				
Max. Output Current / A	50	55	60	66,7	80
Cosφ	0.8ind to 0.8cap				
THDi @ Rated Power	<3%				
EFFICIENCY					
Max. Efficiency	98.7%	98.7%	98.7%	98.7%	98.8%
Med. Efficiency	98.3%	98.3%	98.3%	98.3%	98.4%
PROTECTION FUNCTION					
Anti-Islanding Protection	Integrated				
Input Reverse Polarity Protection	Integrated				
Insulation Resistance Detection	Integrated				
Residual Current Monitoring	Integrated				
Output Over Current Protection	Integrated				
Output Short Circuit Protection	Integrated				
Output Over Voltage Protection	II (DC), III (AC)				
Surge Protection	DC: Type II / AC: Type II				
GENERAL DATA					
Dimensions (W*H*D) / mm	580*435*242				
Weight / kg	42,3	42,3	42,3	42,3	42,3
Noise Emission (Typical) / dB(A)	<45				
User Interface	LCD & LED or LED				
DC Connection Type	MC4				
AC Connection Type	Plug-in Connector Included				
Communication	Stick Wi-Fi included				
Cooling Method	Smart Fan Cooling				
Operating Ambient Temperature / C°	-25 - +60				
Allowable Relative Humidity Range	0% to 100%				
Max. Operating Altitude / m	2000 (>2000 Derating)				
Degree of Protection (IEC 60529)	IP65				
Climatic Category (IEC 60721-3-4)	4K4H				
Topology	Transformerless				
Stand-by Consumption / W	<1				

W-HPT | 80K

Three-Phase Grid-Tied with 6 MPPTs

Integrated monitoring with *my Leonardo* web portal and app



Features



10 Years Warranty



Aluminum Alloy Die Casting



Max. DC Overload 150%



Peak Efficiency 98.7%



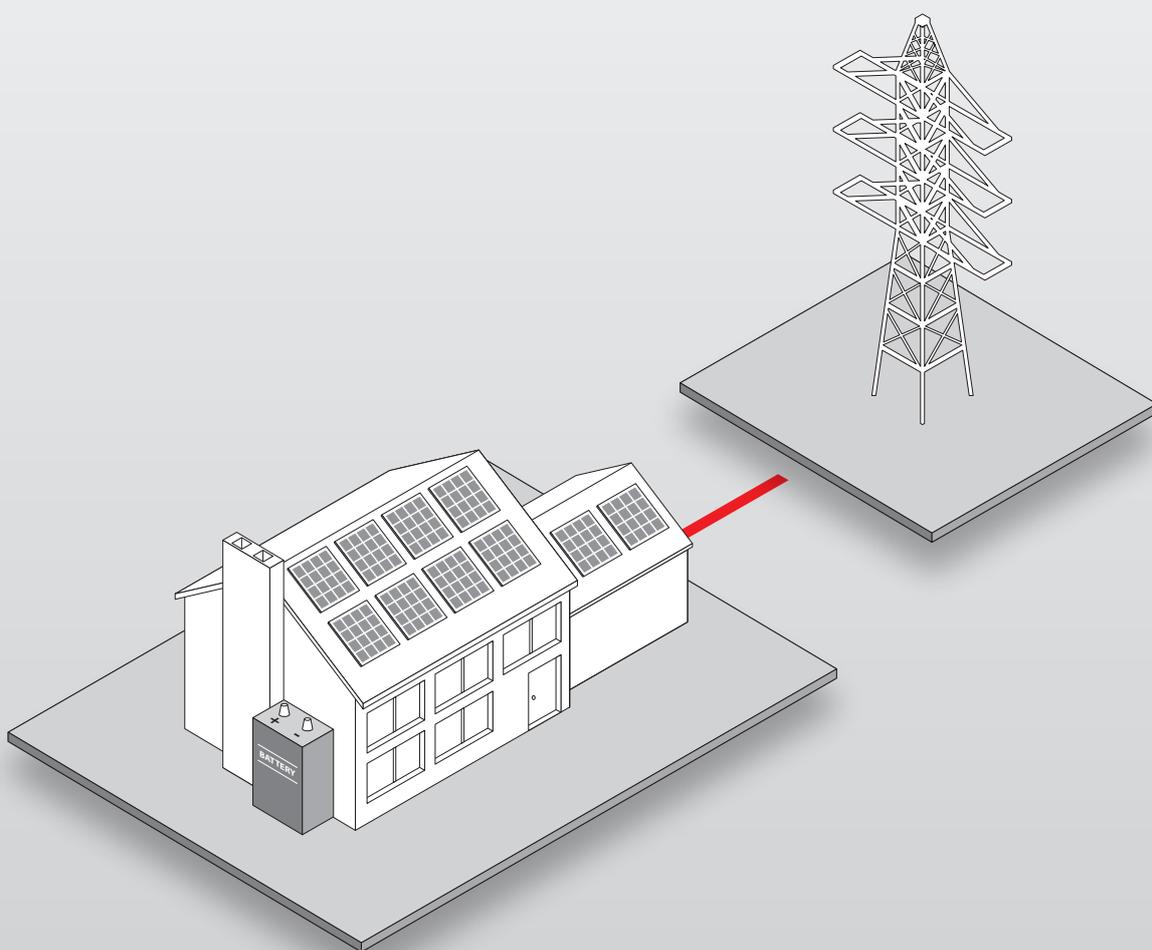
Easy to Install and Service

Block Diagram



MODEL	W-HPT-80K
PRODUCT CODE	019357
INPUT / DC	
Max. PV Power / Wp	120000
Max. Input Voltage / V	1000
MPP Voltage Range / V	150-950
Min. Input Voltage / V	150
Start Up Voltage / V	180
Full Load MPP Voltage Range / V	420-800
Nominal DC-Input Voltage / V	620
Max. Input Current / A	6*32
Max. DC Short Circuit Current / A	6*50
No. of Independent MPPT Inputs	6
No. of PV Strings per MPPT	2
OUTPUT / AC	
Rated Power / W	80
Max. Apparent AC Power / VA	88
Rated Grid Voltage / Vac	380/400
Grid Connection	3L-N-PE
Rated Power Frequency / Hz	50/60
Max. Output Current / A	133,7
Cosφ	0.8ind to 0.8cap
THDi @ Rated Power	<3%
EFFICIENCY	
Max. Efficiency	98,7%
Med. Efficiency	98,4%
PROTECTION FUNCTION	
Anti-Islanding Protection	Integrated
Input Reverse Polarity Protection	Integrated
Insulation Resistance Detection	Integrated
Residual Current Monitoring	Integrated
Output Over Current Protection	Integrated
Output Short Circuit Protection	Integrated
Output Over Voltage Protection	II (DC), III (AC)
Surge Protection	DC: Type II / AC: Type II
GENERAL DATA	
Dimensions (W*H*D) / mm	677*539*281
Weight / kg	55
User Interface	LCD&LED
DC Connection Type	MC4
AC Connection Type	Plug-in Connector included
Communication	Wi-Fi Stick included
Cooling Method	Smart Fan Cooling
Operating Ambient Temperature / °C	-30 ~ +60
Allowable Relative Humidity Range	da 0% a 100%
Max. Operating Altitude / m	3000 (>3000 derating)
Degree of Protection (IEC 60529)	IP66
Climatic Category (IEC 60721-3-4)	4K4H
Topology	Transformerless
Stand-by Consumption / W	<2

W-Hi Series





W-HES | W-HHS

Single-Phase Hybrid Inverters

W-HES | 3-6K

Single-Phase Low-Voltage Hybrid Inverters

Integrated monitoring with *my Leonardo* web portal and app



Features



10 Years Warranty



Peak Efficiency 99%



Max. DC Overload 50%

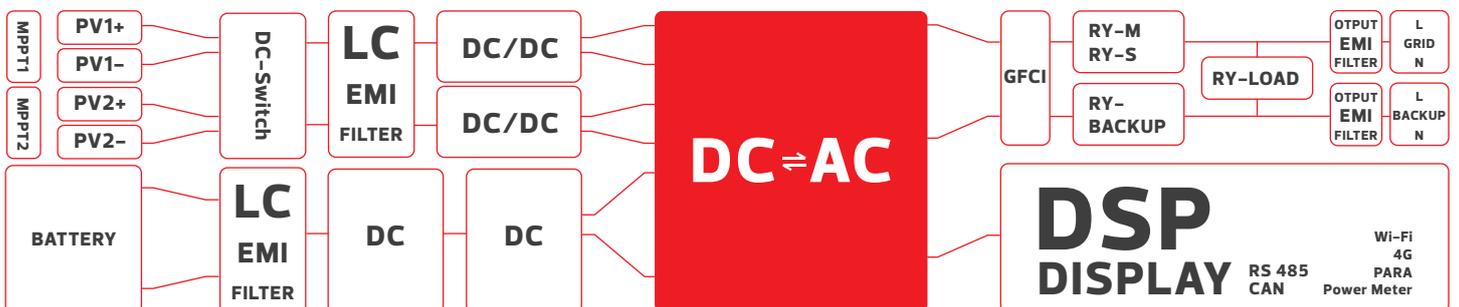


Aluminum Alloy Die Casting



Easy to Install and Service

Block Diagram



MODEL	W-HES 3000	W-HES 3680	W-HES 4000	W-HES 5000	W-HES 6000
PRODUCT CODE	019090	019091	019092	019093	019094
BATTERY INPUT DATA					
Battery Type	Lithium/Lead-Acid				
Battery Voltage Range / V	40-60				
Start Up Voltage / V	48				
Max. Charging/Discharging Current / A	70	70	80	120	120
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
Charging strategy for lead-acid battery	3 Stages Curve				
INPUT / DC					
Max. PV Power / Wp	6000	7360	8000	10000	12000
Max. Input Voltage / V	600				
MPP Voltage Range / V	80-550				
Start Up Voltage / V	70				
Nominal DC-Input Voltage / V	360				
Max. Input Current / A	16				
Max. DC Short Circuit Current / A	20				
No. of Independent MPPT Inputs	2				
No. of PV Strings per MPPT	1				
OUTPUT (AC TO GRID)					
Rated Power to Grid / W	3000	3680	4000	5000	6000
Max. Apparent AC Power to Grid / VA	3300	4048	4400	5500	6600
Max. Apparent AC Power from Grid / VA	6600	8096	8800	10000	10000
Rated Grid Voltage / Vac	220/230/240				
Rated Power Frequency / Hz	50/60				
Max. Output Current to Grid / A	14,3	17,6	19,1	23,9	28,7
Max. AC Current from Grid / A	28,7	35,2	38,3	40	40
Cosφ	0,8 ind a 0,8 cap				
THDi@ Rated Power	<3%				
OUTPUT (AC TO LOADS)					
Max Apparent Output Power / VA	3300	4048	4400	5500	6600
Peak Apparent Output Power / VA	6000	7360	8000	10000	12000
Rated Power Frequency / Hz	50/60				
Max. Output Current / A	14,3	17,6	19,1	23,9	28,7
Automatic Switch Time / ms	<10				
Nominal Output Voltage / V	230				
Nominal Output Frequency / Hz	50/60				
THDv @ Linear Load	<2%				
EFFICIENCY					
Max. Efficiency	98%				
Med. Efficiency	97,6%				
PV Max MPPT Efficiency	99,9%				
Battery Charged by PV Max. Efficiency	96%				
Battery Charge/Discharge from/to AC Max. Efficiency	95%				

PROTECTION FUNCTION	
Anti-Islanding Protection	Integrated
Insulation Resistance Detection	Integrated
Residual Current Monitoring	Integrated
Output Over Current Protection	Integrated
Output Short Circuit Protection	Integrated
Over Voltage Protection	Integrated
Surge Protection	DC Type II, AC Type III
GENERAL DATA	
Dimensions (W*H*D) / mm	485*365*180
Weight / kg	20
User Interface	LCD&LED
DC Connection Type	MC4
Battery Connection Type	Plug-in
AC Connection Type	OT Terminal+Shell
Communication with Cloud	Wi-Fi Stick included
Communication with BMS	CAN, RS485
Communication with Power Meter	RS485
Cooling Method	Fanless
Operating Ambient Temperature / °C	-30 ~ +60
Relative Humidity	0% - 100%
Max. Operating Altitude / m	3000 (> 3000 Derating)
Protection Class (IEC 60529)	IP65
Climatic Category (IEC 60721-3-4)	4K4H
Topology	Transformerless
Night Consumption / W	<5

Compatible with:



W-HHS | 3-6K

Single-Phase Hybrid with High-Voltage Batteries

Integrated monitoring with *my Leonardo* web portal and app



Features



10 Years Warranty



Peak Efficiency 97.6%



Max. DC Overload 50%

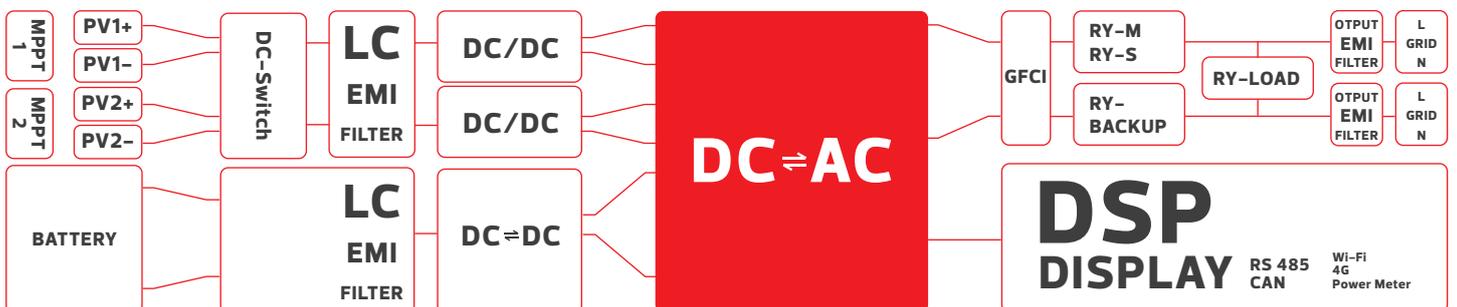


Aluminum Alloy Die Casting



Easy to Install and Service

Block Diagram



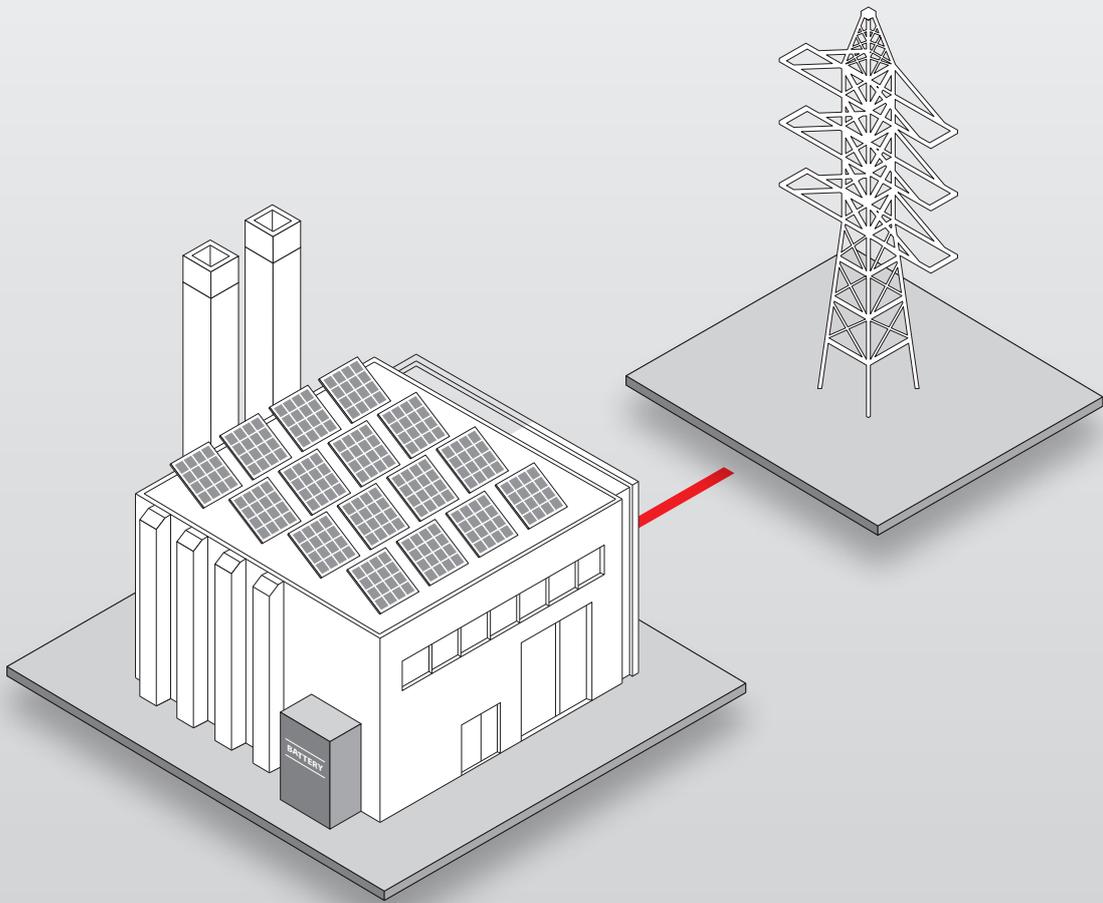
MODEL	W-HHS 3000	W-HHS 3680	W-HHS 5000	W-HHS 6000
PRODUCT CODE	018121	018122	018123	018124
BATTERY INPUT DATA				
Battery Type	Li-Ion			
Battery Voltage Range / V	80 - 480			
Start Up Voltage / V	70			
Max. Charging/Discharging Current / A	25			
Charging Strategy for Li-Ion Battery	Auto-Adaption to BMS			
INPUT / DC				
Max. PV Power / Wp	4950	5520	7500	9600
Max. Input Voltage / V	600			
MPP Voltage Range / V	80-520			
Min. Input Voltage / V	70			
Start Up Voltage / V	125			
Nominal DC-Input Voltage / V	360			
Max. Input Current / A	13			
Max. Short DC Current / A	20			
No. of Independent MPPT Inputs	2			
No. of PV Strings per MPPT	1			
OUTPUT (AC TO GRID)				
Rated Power to Grid / W	3000	3680	5000	6000
Max. Apparent AC Power to Grid / VA	3300	3680	5500	6600
Max. Apparent AC Power from Grid / VA	6600	7360	8500	10000
Rated Grid Voltage / vac	220/230/240			
Rated Power Frequency / Hz	50/60			
Max. Output Current to Grid / A	15	16	23	27.3
Max. AC Current from Grid / A	30	32	36	40
Cosφ	0.8ind to 0.8cap			
THDi@ Rated Power	<3%			
OUTPUT (AC TO LOADS)				
Max. Apparent Output Power / VA	3300	3680	5000	6000
Peak Apparent Output Power / VA	3960	4416	6000	7200
Rated Power Frequency / Hz	50/60			
Max. Output Current / A	15	16	23	27.3
Automatic Switch Time / ms	<10			
Nominal Output Voltage / V	230 (±2%)			
Nominal Output Frequency / Hz	50/60(±0.2%)			
THDv @ Linear Load	<3%			
EFFICIENCY				
Max. Efficiency	97.6%			
Med. Efficiency	97.4%			
PV Max MPPT Efficiency	99.9%			
Battery Charged by PV Max. Efficiency	98.0%			
Battery Charge/Discharge From/To AC Max. Efficiency	97.0%			

PROTECTION FUNCTION	
Anti-Islanding	Integrated
Insulation Resistance Detection	Integrated
Residual Current Monitoring	Integrated
Output Over Current	Integrated
Output Over Voltage	II (DC), III (AC)
Output Short Circuit	Integrated
Surge Protection	DC: Optional / AC: Type II
GENERAL DATA	
Dimensions (W*H*D) / mm	425*351*160
Weight / kg	13.8
Noise Emission (typical) / dB (A)	<25
User interface	LED&LCD
DC Connection Type	MC4 (SUNCLIX, H4 Optional)
Battery Connection Type	SUNCLIX
AC Connection Type	Plug-in connector included
Communication with Cloud	Wi-Fi Stick included
Communication with BMS	CAN, RS485
Communication with Power Meter	RS485
Cooling Method	Fanless
Operating Ambient Temperature / C°	-25 ~ +60
Relative Humidity	0% - 100%
Max. Operating Altitude / m	3000 (> 3000 Derating)
Degree of Protection (IEC 60529)	IP65
Climatic Category (IEC 60721-3-4)	4K4H
Topology	Transformerless
Stand-by Consumption / W	<5

Compatible with:



W-Hi Series





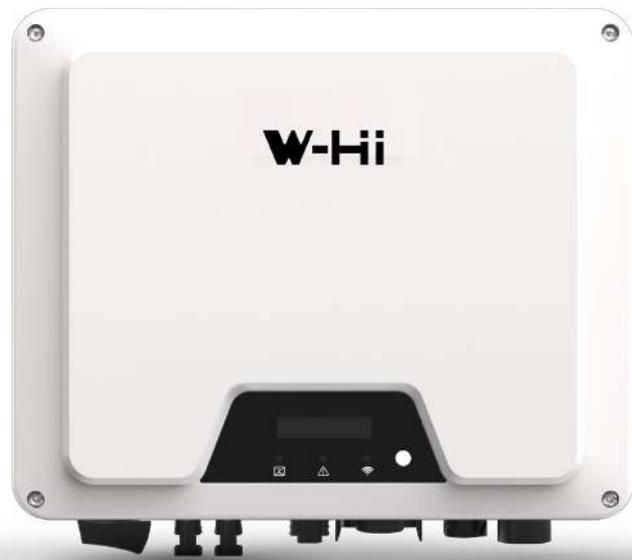
W-HHT

Three-Phase Hybrid Inverters

W-HHT | 5-10K

Three-Phase High-Voltage Hybrid Inverter

Integrated monitoring
with *my Leonardo*
web portal and app



Features



10 Years
Warranty



Peak Efficiency
98.2%



Max. DC Overload
50%

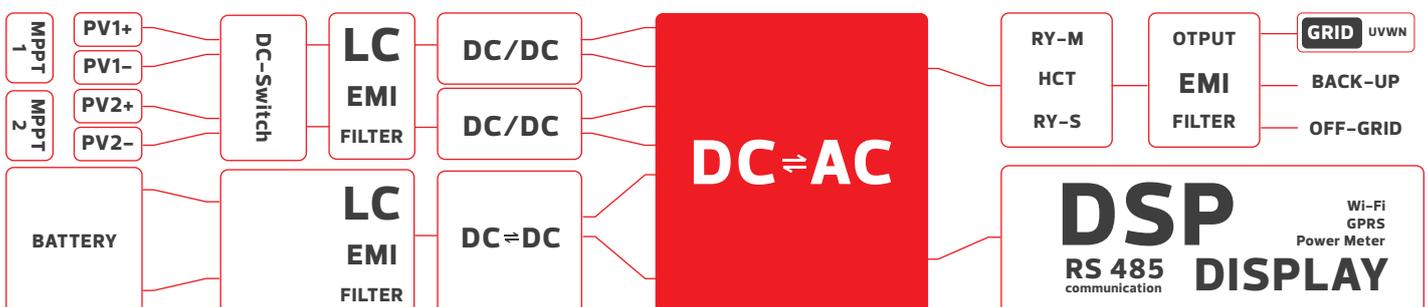


Aluminum Alloy
Die Casting



Easy to
Install and Service

Block Diagram



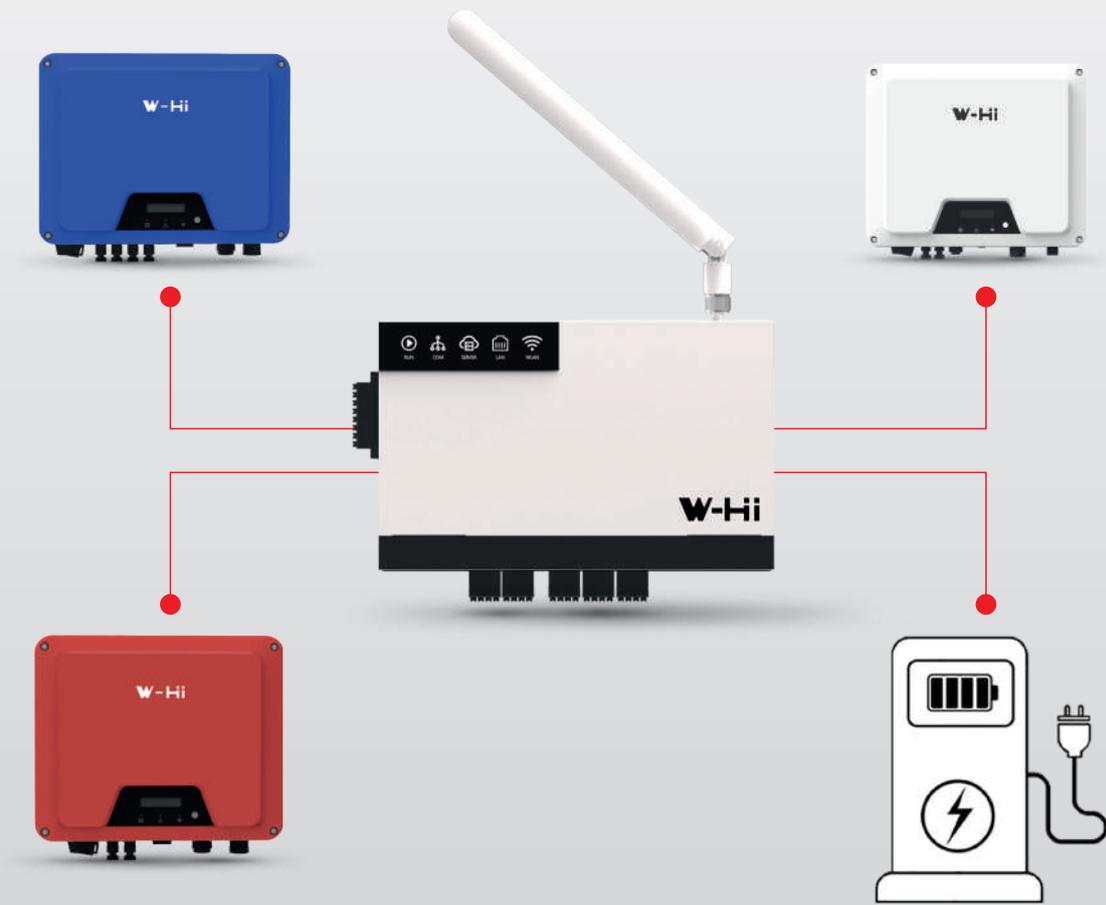
MODEL	W-HHT 5000	W-HHT 6000	W-HHT 8000	W-HHT 10000
PRODUCT CODE	018638	018639	018640	018641
BATTERY INPUT DATA				
Battery Type	Li-Ion			
Battery Voltage Range / V	160-800			
Start Up Voltage / V	160			
Max. Charging/Discharging Current / A	25/25			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
INPUT / DC				
Max. PV Power / Wp	7500	9000	12000	15000
Max. Input Voltage / V	1000			
MPP Voltage Range / V	150-850			
Min. Input Voltage / V	145			
Start Up Voltage / V	180			
Nominal DC-Input Voltage / V	620			
Max. Input Current / A	15 for string			
Max. DC Short Circuit Current / A	20 for string			
No. of Independent MPPT Inputs	2			
No. of PV Strings per MPPT	1/1			
OUTPUT (AC TO GRID)				
Rated Power to Grid / W	5000	6000	8000	10000
Max. Apparent AC Power to Grid / VA	5500	6600	8800	11000
Max. Apparent AC Power from Grid / VA	11000	13200	16500	16500
Rated Grid Voltage / Vac	380/400			
Grid Connection	3 / 3L-N-PE			
Rated Power Frequency / Hz	50/60			
Max. Output Current to Grid / A	8,5	10	13,5	16
Max. AC Current from Grid / A	17	20	23	23
Cosφ	0.8ind to 0.8cap			
THDi@ Rated Power	<3%			
OUTPUT (AC TO LOADS)				
Rated Power / W	5000	6000	8000	10000
Peak Apparent Output Power @60" / VA	10000	12000	15000	15000
Rated Power Frequency / Hz	50/60			
Max. Output Current / A	8,5	10	13,5	16
Automatic Switch Time / ms	<10			
Nominal Output Voltage / V	380/400			
Nominal Output Frequency / Hz	50/60			
THDv @ Linear Load	<3%			
EFFICIENCY				
PV Max. Efficiency	98.0%	98.0%	98.2%	98.2%
Battery Charge/Discharge From/To AC Max. Efficiency	97.6%			

PROTECTION FUNCTION	
Anti-Islanding Protection	Integrated
Insulation Resistance Detection	Integrated
Residual Current Monitoring	Integrated
Output Over Current Protection	Integrated
Output Short Circuit Protection	Integrated
Over Voltage Protection	II (DC), III (AC)
Surge Protection	AC: Type II
GENERAL DATA	
Dimensions (W*H*D) / mm	425*351*200
Weight / kg	16
Noise Emission (typical) / dB (A)	<25
User interface	LED
DC Connection Type	MC4
Battery Connection Type	SUNCLIX
AC Connection Type	Plug-in connector included
Communication with Cloud	Wi-Fi Stick included
Communication with BMS	CAN, RS485
Communication with Power Meter	RS485
Cooling Method	Fanless
Operating Ambient Temperature / C°	-25 ~ +60
Relative Humidity	0% - 100%
Max. Operating Altitude / m	3000 (> 3000 Derating)
Protection Class (IEC 60529)	IP65
Climatic Category (IEC 60721-3-4)	4K4H
Topology	Transformerless
Night Consumption / W	<5

Compatible with:



W-Hi Series





W-Hi Manager

Energy Manager and Data-logger

W-Hi Manager

Energy Manager and Data-logger

Integrated monitoring
with *my Leonardo*
web portal and app



Features



Intelligent Energy
Management



Cloud Data
Transmission



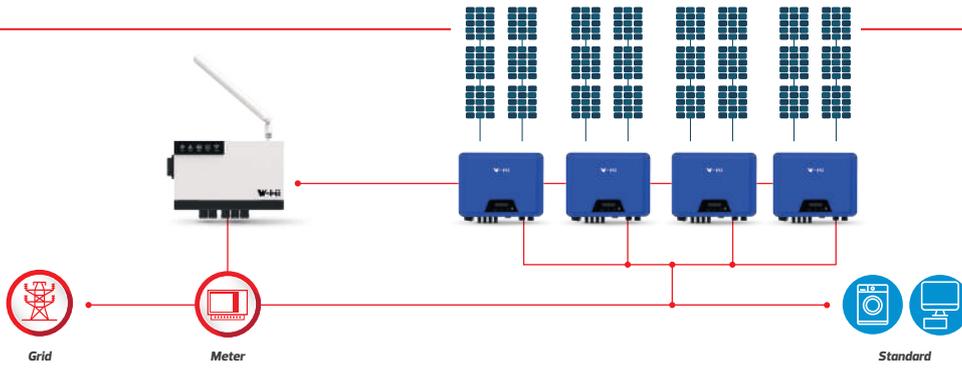
24/7 Real-Time
Consumption Monitoring



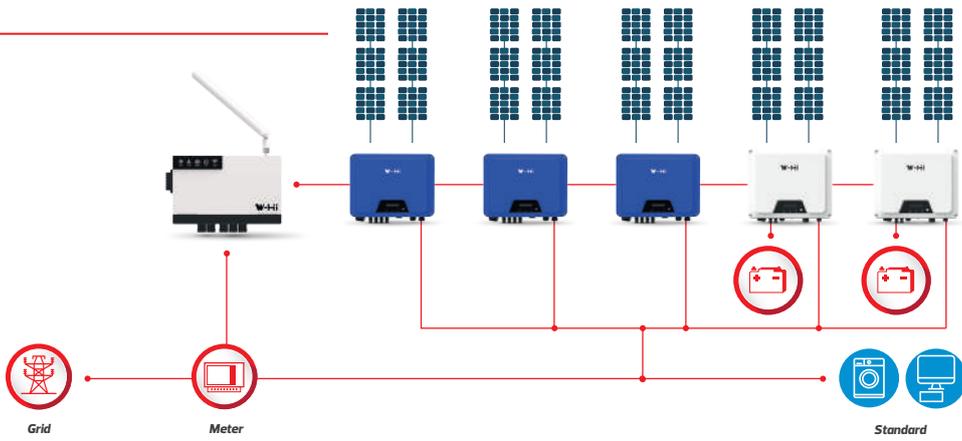
Easy to
Install and Service

MODEL	W-Hi Manager
PRODUCT CODE	018761
POWER ADAPTER	
Input Voltage Range / V	95-265
Frequency / Hz	50/60
Output Voltage / V	12
Output Current / A	0.8
HARDWARE	
N° of Managed Inverter	48
Inverter Communication	RS485*3
Wireless Module	Wi-Fi
Ethernet Module	LAN (100Mbps)
Meter Interface	RS485 / LAN
N° of Digital Input Interface	4
N° of Dry Contact Output	4
GENERAL DATA	
Dimensions (W*H*D) / mm	115*40,5*180
Weight / kg	0,74
Protection Class	IP20
Installation Method	Wall Mounted / Din-Rail
Operating Temperature / °C	-20 ~ +60

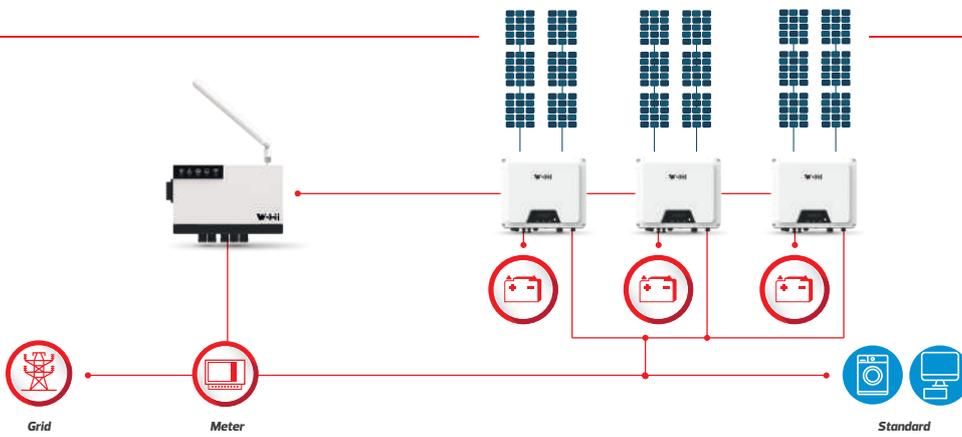
Scheme 1



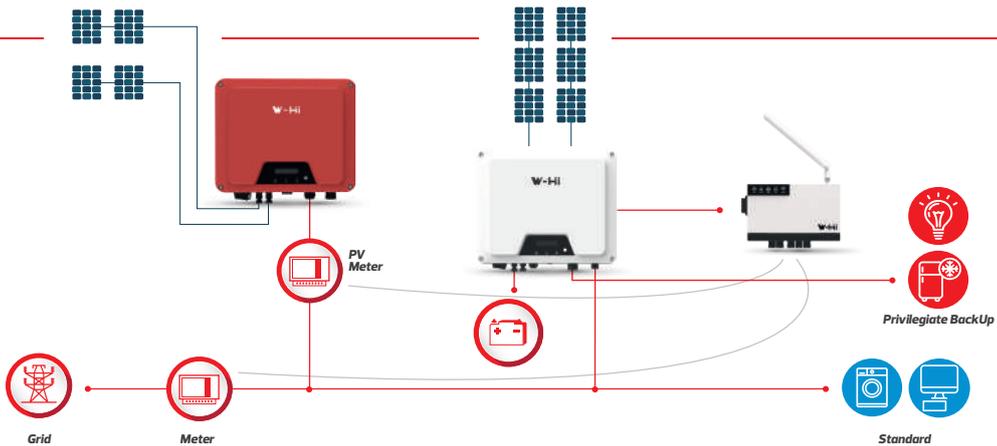
Scheme 2



Scheme 3



Scheme 4





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