

PVI-55.0

PVI-110.0

PVI-165.0/220.0

PVI-275.0/330.0

GENERAL SPECIFICATIONS

AURORA[®] CORE
PLUS
ULTRA

These extremely scalable modular inverter systems, based on 55kW modular blocks, increase usable power and improve availability. The reduction of performance in any individual module will not impact the energy-harvesting capabilities of other modules.

The product is available with and without transformer. Industry-leading power conversion efficiencies of up to 98% (-TL), combined with high-speed Maximum Power Point Tracking (MPPT) channels, optimize energy harvesting across a wide array of operating conditions.

Inverter systems are delivered pre-configured and pre-tested, significantly reducing on-site wiring and testing. In case of ungrounded application the unit can be configured as single or multiple MPPT (with exception of PVI-55.0/-TL).

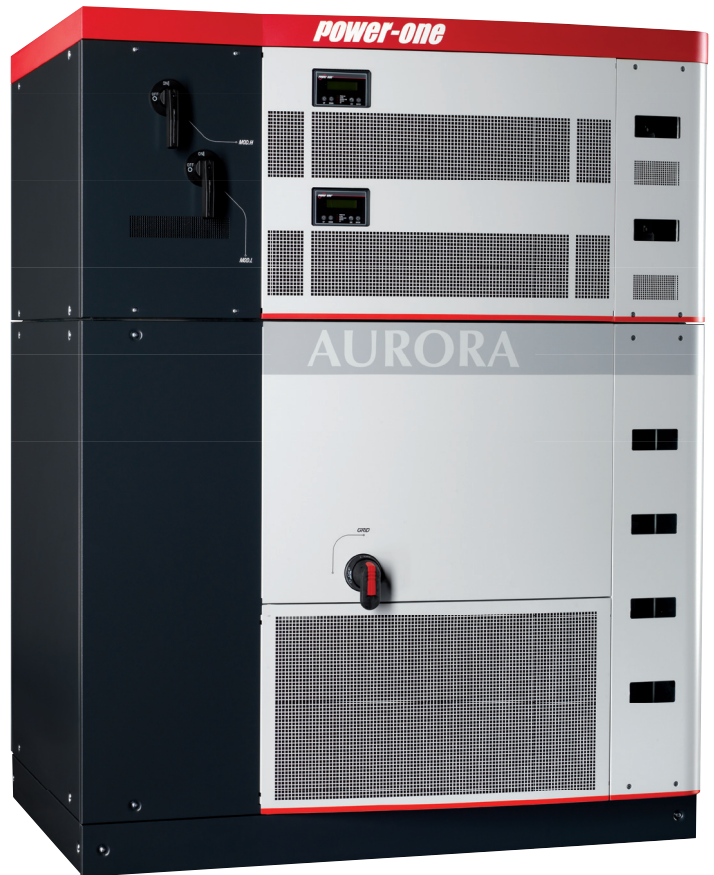
Features

- Reduced susceptibility to a single fault. In case of a component failure, a maximum of 55kW will be lost
- Reduced acoustic noise due to the high switching frequency
- Reverse-polarity protection minimizes potential damage caused by array mis-wiring
- Maximum input voltage up to 1000Vdc, high design flexibility and reduced DC distribution losses for large scale PV plants
- Integrated DC and AC distribution and protection. Fully equipped for connection, additional accessories not required
- Easy installation and maintenance procedure. Front extractible DC/AC converters and accessibility to all critical parts
- High efficiencies deliver more energy
- Two independent RS-485 communication interfaces for inverter and intelligent string combiner monitoring
- Integrated DC disconnect switch for each 55 kW module AC and DC side integrated protection (fuses and OVR) easily replaceable
- Compliant to BDEW

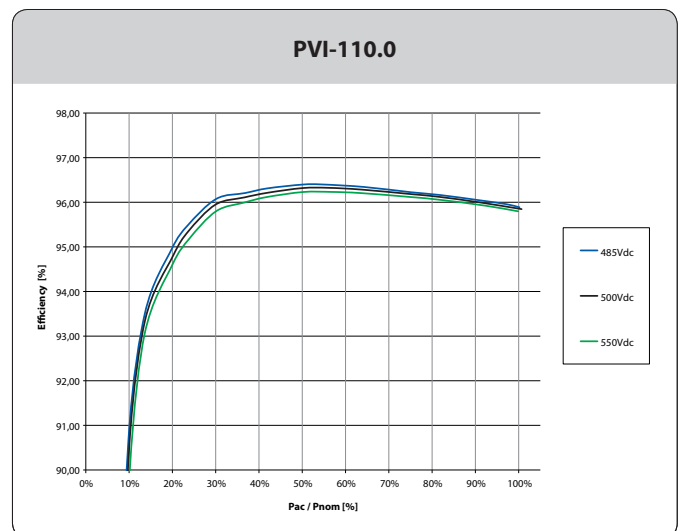
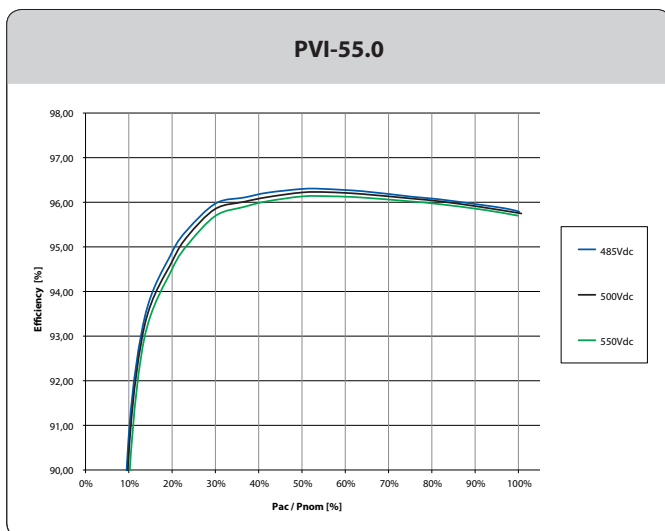
PVI-55.0 PVI-55.0-TL PVI-110.0 PVI-110.0-TL

GENERAL SPECIFICATIONS CENTRALIZED MODELS

PVI-55.0
PVI-55.0-TL
PVI-110.0
PVI-110.0-TL



Efficiency Curves



PARAMETER	PVI-55.0	PVI-55.0-TL	PVI-110.0	PVI-110.0-TL
Input Side				
Absolute Maximum DC Input Voltage ($V_{max,abs}$)	1000 V		1000 V	
MPPT Input DC Voltage Range ($V_{MPPTmin} \dots V_{MPPTmax}$) at V_{acr}	485...950 V Linear derating from MAX to 31,8% [$800 < V_{MPPT} < 950V$]		485...950 V Linear derating from MAX to 31,8% [$800 < V_{MPPT} < 950V$]	
MPPT Input DC Range ($V_{MPPTmin} \dots V_{MPPTmax}$) at P_{acr} and V_{acr}	485...800 V		485...800 V	
Number of Independent MPPT Multi-Master	1		2	
Number of Independent MPPT Multi - Master/Slave	Not applicable		Not applicable	
Number of Independent MPPT Master/Slave	1		1	
Maximum Combined DC Input Current ($I_{dcmax,c}$)	123 A		246 A	
Maximum DC Input Current for Each Module ($I_{dcmax,m}$)	123 A		123 A	
Number of DC Inputs Pairs	1		2	
DC Connection Type (both positive and negative polarity)	2x185mm ² (M10)		2x185mm ² (M10) + 2x300mm ² (M10)	
Input Protection				
Reverse Polarity Protection	YES, with series diode		YES, with series diode	
Input Over Voltage Protection - Varistor	1 for each input pair, Class II		1 for each input pair, Class II	
Photovoltaic Array Isolation Control, floating Neutral, floating panels	Yes, Proprietary Control ⁽⁴⁾		Yes, Proprietary Control ⁽⁴⁾	
Residual Current Protection, grounded Neutral, floating panels	Not included; dimension output ground fault device with $\Delta I=400mA/module$		Not included; dimension output ground fault device with $\Delta I=400mA/module$	
Fuse Size for Each Input Pair	125 A / 1000 V		125 A / 1000 V	
Output Side				
AC Grid Connection Type	Three phases 4W+PE	Three phases 3W+PE	Three phases 4W+PE	Three phases 3W+PE
Rated AC Power (P_{acr})	55 kW		110 kW	
Rated Grid Voltage (V_{acr})	400 V	320 V	400 V	320 V
AC Voltage Range ($V_{acmin} \dots V_{acmax}$)	320...480 V ⁽¹⁾	256...368 V ⁽¹⁾	320...480 V ⁽¹⁾	256...368 V ⁽¹⁾
Maximum Output Current (I_{acmax})	81 A	101 A	160 A	202 A
Rated Frequency (f)	50/60 Hz		50/60 Hz	
Frequency Range ($f_{min} \dots f_{max}$)	47...53 / 57...63 Hz ⁽²⁾		47...53 / 57...63 Hz ⁽²⁾	
Power Factor (Cosphi _{acr})	> 0.995 (adj. \pm 0.90)		> 0.995 (adj. \pm 0.90)	
Total Harmonic Distortion	< 3% (@ P_{acr})		< 3% (@ P_{acr})	
AC Connection Type (for each phase)	1 x 95 mm ² (M8)	1 x 300 mm ² (M12)	1 x 95 mm ² (M8)	1 x 300 mm ² (M12)
Output Protection				
Anti-Islanding Protection	According to local standard		According to local standard	
Output Overvoltage Protection (Varistor)	Yes, Class II		Yes, Class II	
Night Time Disconnect	Yes		Yes	
AC Circuit Breaker	50 kA		50 kA	
Operating Performance				
Maximum Efficiency (η_{max})	96.3% ⁽⁵⁾	98.0% ⁽⁵⁾	96.4% ⁽⁵⁾	98.0% ⁽⁵⁾
Weighted Efficiency (η_{EURO} / η_{CEC})	95.1% / 96.0% ⁽⁵⁾	97.7% / 97.5% ⁽⁵⁾	95.2% / 96.0% ⁽⁵⁾	97.7% / 97.5% ⁽⁵⁾
Stand-by Consumption/Night-time power loss	< 17 W	< 23 W	< 24 W	< 19 W
AC Auxiliary Supply	3x400 Vac +N, 50/60 Hz		3 x 400 Vac +N, 50/60 Hz	
Auxiliary Supply Consumption	< 0.36% of P_{acr}	< 0.24% of P_{acr}	< 0.31% of P_{acr}	< 0.24% of P_{acr}
Auxiliary Supply Consumption without Cooling	< 0.25% of P_{acr}	< 0.22% of P_{acr}	< 0.23% of P_{acr}	< 0.22% of P_{acr}
Inverter Switching Frequency	18 kHz		18 kHz	
Communication				
Wired Local Monitoring	PVI-USB-RS232_485 (opt.)		PVI-USB-RS232_485 (opt.)	
Remote Monitoring	PVI-AEC-EVO (opt.), AURORA-UNIVERSAL (opt.)		PVI-AEC-EVO (opt.), AURORA-UNIVERSAL (opt.)	
AURORA String Combiner	PVI-STRINGCOMB (opt.)		PVI-STRINGCOMB (opt.)	
User Interface	16 characters x 2 line LCD display for each module		16 characters x 2 line LCD display for each module	
Environmental				
Ambient Temperature Range	-10...+ 60°C/+14...140°F with derating above 50°C/122°F		-10...+ 60°C/+14...140°F with derating above 50°C/122°F	
Relative Humidity	0...95% non condensing		0...95% non condensing	
Noise Emission	<62 dB(A) @ 1 m	<62 dB(A) @ 1 m	<65 dB(A) @ 1 m	< 63 db (A) @ 1 m
Maximum Operating Altitude without Derating	1000 m / 3280 ft		1000 m / 3280 ft	
Physical				
Environmental Protection Rating	IP 20		IP 20	
Cooling	Air Forced		Air Forced	
Required Air Cooling Flow	1600 m ³ /h - 944 CFM		2800 m ³ /h - 1652 CFM	2400 m ³ /h - 1416 CFM
Dimension (H x W x D)	1675mm x 1250mm x 850mm / 69.5" x 49.2" x 33.5"	1077mm x 1250mm x 850mm / 42.4" x 49.2" x 33.5"	1675mm x 1250mm x 850mm / 65.9" x 49.2" x 33.5"	1077mm x 1250mm x 850mm / 42.4" x 49.2" x 33.5"
Weight	< 700 kg / 1543 lb	< 350 kg / 771 lb	< 800 kg / 1765 lb	< 480 kg / 1058 lb
Weight of the module	< 60 kg / 132 lb		< 60 kg / 132 lb	
Safety				
Transformer	Yes	No	Yes	No
Marking	CE		CE	
Safety and EMC Standard	EN 50178, EN61000-6-2, EN61000-6-4, EN61000-3-11, EN61000-3-12		EN 50178, EN61000-6-2, EN61000-6-4, EN61000-3-11, EN61000-3-12	
Grid Standard	Enel Guideline, CEI 0-21 ⁽³⁾ + Attachment A70 Terna ⁽³⁾ , CEI 0-16 ⁽³⁾ , BDEW, RD 1663		Enel Guideline, CEI 0-21 ⁽³⁾ + Attachment A70 Terna ⁽³⁾ , CEI 0-16 ⁽³⁾ , BDEW, RD 1663	

1. The AC voltage range may vary depending on specific country grid standard

2. The Frequency range may vary depending on specific country grid standard

3. Since their applicability dates

4. Missing symmetry with respect to ground results in AC disconnection (disable function by default)

5. Power consumption of the auxiliary services not included

Remark. Features not specifically listed in the present data sheet are not included in the product

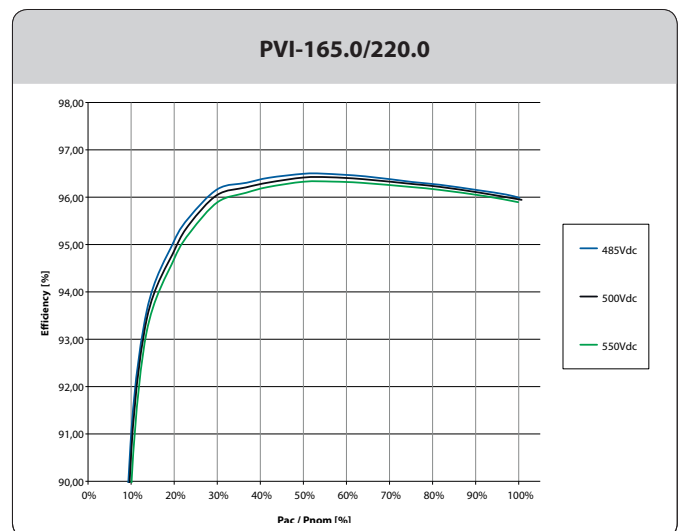
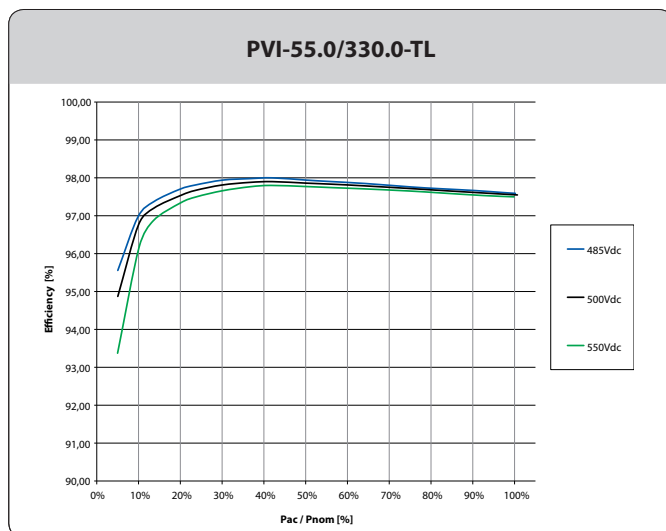
PVI-165.0 / PVI-165.0-TL PVI-220.0 / PVI-220.0-TL

GENERAL SPECIFICATIONS CENTRALIZED MODELS

PVI-165.0
PVI-165.0-TL
PVI-220.0
PVI-220.0-TL



Efficiency Curves



PARAMETER	PVI-165.0	PVI-165.0-TL	PVI-220.0	PVI-220.0-TL
Input Side				
Absolute Maximum DC Input Voltage ($V_{max,abs}$)	1000 V		1000 V	
MPPT Input DC Voltage Range ($V_{MPPTmin} \dots V_{MPPTmax}$) at V_{acr}	485...950 V Linear derating from MAX to 31,8% [800< V_{MPPT} <950V]		485...950 V Linear derating from MAX to 31,8% [800< V_{MPPT} <950V]	
MPPT Input DC Range ($V_{MPPTmin} \dots V_{MPPTmax}$) at P_{acr} and V_{acr}	485...800 V		485...800 V	
Number of Independent MPPT Multi-Master	3		4	
Number of Independent MPPT Multi - Master/Slave	2		2	
Number of Independent MPPT Master/Slave	1		1	
Maximum Combined DC Input Current ($I_{dc,max}$)	369 A		492 A	
Maximum DC Input Current for Each Module ($I_{dc,max,m}$)	123 A		123 A	
Number of DC Inputs Pairs	3		4	
DC Connection Type (both positive and negative polarity)	4x185mm ² (M10) + 2x300mm ² (M10)		4x185mm ² (M10)+ 4x300mm ² (M10)	
Input Protection				
Reverse Polarity Protection	YES, with series diode		YES, with series diode	
Input Over Voltage Protection - Varistor	1 for each input pair, Class II		1 for each input pair, Class II	
Photovoltaic Array Isolation Control, floating Neutral, floating panels	Yes, Proprietary Control ⁽⁴⁾		Yes, Proprietary Control ⁽⁴⁾	
Residual Current Protection, grounded Neutral, floating panels	Not included; dimension output ground fault device with $\Delta I=400mA/module$		Not included; dimension output ground fault device with $\Delta I=400mA/module$	
Fuse Size for Each Input Pair	125 A / 1000 V		125 A / 1000 V	
Output Side				
AC Grid Connection Type	Three phases 4W+PE	Three phases 3W+PE	Three phases 4W+PE	Three phases 3W+PE
Rated AC Power (P_{acr})	165 kW		220 kW	
Rated Grid Voltage (V_{acr})	400 V	320 V	400 V	320 V
AC Voltage Range ($V_{acmin} \dots V_{acmax}$)	320...480 V ⁽¹⁾	256...368 V ⁽¹⁾	320...480 V ⁽¹⁾	256...368 V ⁽¹⁾
Maximum Output Current ($I_{ac,max}$)	240 A	303 A	320 A	404 A
Rated Frequency (f_r)	50/60 Hz		50/60 Hz	
Frequency Range ($f_{min} \dots f_{max}$)	47...53 / 57...63 Hz ⁽²⁾		47...53 / 57...63 Hz ⁽²⁾	
Power Factor ($\cos\phi_{P_{acr}}$)	> 0.995 (adj. \pm 0.90)		> 0.995 (adj. \pm 0.90)	
Total Harmonic Distortion	< 3% (@ P_{acr})		< 3% (@ P_{acr})	
AC Connection Type (for each phase)	1 x 185 mm ² (M10)	2 x 300 mm ² (M12)	1 x 185 mm ² (M10)	2 x 300 mm ² (M12)
Output Protection				
Anti-Islanding Protection	According to local standard		According to local standard	
Output Overvoltage Protection (Varistor)	Yes, Class II		Yes, Class II	
Night Time Disconnect	Yes		Yes	
AC Circuit Breaker	50 kA		50 kA	
Operating Performance				
Maximum Efficiency (η_{max})	96.5% ⁽⁵⁾	98.0% ⁽⁵⁾	96.5% ⁽⁵⁾	98.0% ⁽⁵⁾
Weighted Efficiency (η_{EURO} / η_{CEC})	95.3% / 96.0% ⁽⁵⁾	97.7% / 97.5% ⁽⁵⁾	95.3% / 96.0% ⁽⁵⁾	97.7% / 97.5% ⁽⁵⁾
Stand-by Consumption/Night-time power loss	< 31 W		< 33 W	
AC Auxiliary Supply	3 x 400 Vac +N, 50/60 Hz		3 x 400 Vac +N, 50/60 Hz	
Auxiliary Supply Consumption	< 0.30% of P_{acr}	< 0.24% of P_{acr}	< 0.28% of P_{acr}	< 0.24% of P_{acr}
Auxiliary Supply Consumption without Cooling	< 0.23% of P_{acr}	< 0.22% of P_{acr}	< 0.22% of P_{acr}	< 0.22% of P_{acr}
Inverter Switching Frequency	18 kHz		18 kHz	
Communication				
Wired Local Monitoring	PVI-USB-RS232_485 (opt.)		PVI-USB-RS232_485 (opt.)	
Remote Monitoring	PVI-AEC-EVO (opt.), AURORA-UNIVERSAL (opt.)		PVI-AEC-EVO (opt.), AURORA-UNIVERSAL (opt.)	
AURORA String Combiner	PVI-STRINGCOMB (opt.)		PVI-STRINGCOMB (opt.)	
User Interface	16 characters x 2 line LCD display for each module		16 characters x 2 line LCD display for each module	
Environmental				
Ambient Temperature Range	-10...+ 60°C/+14...140°F with derating above 50°C/122°F		-10...+ 60°C/+14...140°F with derating above 50°C/122°F	
Relative Humidity	0...95% non condensing		0...95% non condensing	
Noise Emission	< 68 db (A) @ 1 m	< 66 db (A) @ 1 m	< 72 db (A) @ 1 m	< 69 db (A) @ 1 m
Maximum Operating Altitude without Derating	1000 m / 3280 ft		1000 m / 3280 ft	
Physical				
Environmental Protection Rating	IP 20		IP 20	
Cooling	Air Forced		Air Forced	
Required Air Cooling Flow	4000 m ³ /h - 2360 CFM	3200 m ³ /h - 1888 CFM	4800 m ³ /h - 2832 CFM	4000 m ³ /h - 2360 CFM
Dimension (H x W x D)	2184mm x 1250mm x 850mm / 86.0" x 49.2" x 33.5"	1675mm x 1250mm x 850mm / 65.9" x 49.2" x 33.5"	2184mm x 1250mm x 850mm / 86.0" x 49.2" x 33.5"	1675mm x 1250mm x 850mm / 65.9" x 42.9" x 33.5"
Weight	< 1200 kg / 2646 lb	< 680 kg / 1500 lb	< 1300 kg / 2867 lb	< 780 kg / 1720 lb
Weight of the module	< 60 kg / 132 lb		< 60 kg / 132 lb	
Safety				
Transformer	Yes	No	Yes	No
Marking	CE		CE	
Safety and EMC Standard	EN 50178, EN61000-6-2, EN61000-6-4, EN61000-3-11, EN61000-3-12		EN 50178, EN61000-6-2, EN61000-6-4, EN61000-3-11, EN61000-3-12	
Grid Standard	Enel Guideline, CEI 0-21 ⁽³⁾ + Attachment A70 Terna ⁽³⁾ , CEI 0-16 ⁽³⁾ , BDEW, RD 1663		Enel Guideline, CEI-0-16 ⁽³⁾ , Attachment A70 Terna ⁽³⁾ , BDEW, RD 1663	

1. The AC voltage range may vary depending on specific country grid standard

2. The Frequency range may vary depending on specific country grid standard

3. Since their applicability dates

4. Missing symmetry with respect to ground results in AC disconnection (disable function by default)

5. Power consumption of the auxiliary services not included

Remark. Features not specifically listed in the present data sheet are not included in the product

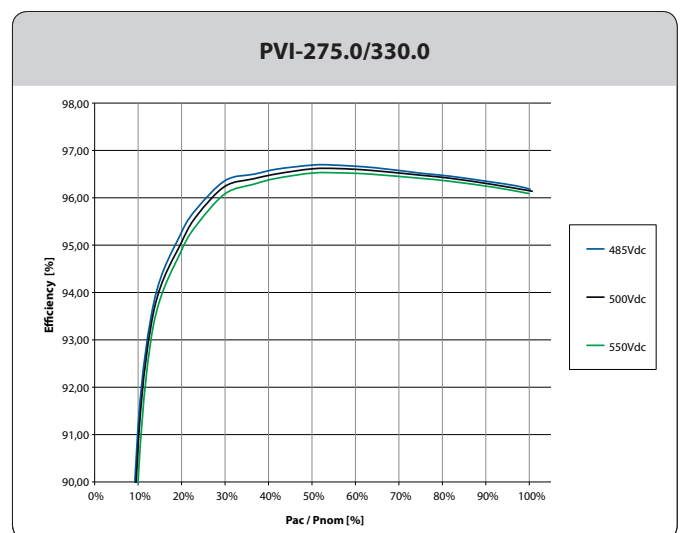
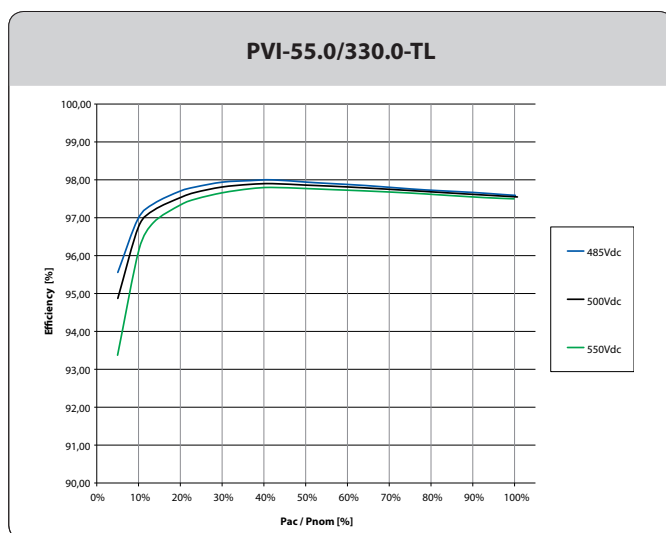
PVI-275.0 / PVI-275.0-TL PVI-330.0 / PVI-330.0-TL

GENERAL SPECIFICATIONS CENTRALIZED MODELS

PVI-275.0
PVI-275.0-TL
PVI-330.0
PVI-330.0-TL



Efficiency Curves



PARAMETER	PVI-275.0	PVI-275.0-TL	PVI-330.0	PVI-330.0-TL
Input Side				
Absolute Maximum DC Input Voltage ($V_{max,abs}$)	1000 V		1000 V	
MPPT Input DC Voltage Range ($V_{MPPTmin} \dots V_{MPPTmax}$) at V_{acr}	485...950 V Linear derating from MAX to 31,8% [$800 < V_{MPPT} < 950V$]		485...950 V Linear derating from MAX to 31,8% [$800 < V_{MPPT} < 950V$]	
MPPT Input DC Range ($V_{MPPTmin} \dots V_{MPPTmax}$) at P_{acr} and V_{acr}	485...800 V		485...800 V	
Number of Independent MPPT Multi-Master	5		6	
Number of Independent MPPT Multi - Master/Slave	3		3	
Number of Independent MPPT Master/Slave	1		1	
Maximum Combined DC Input Current (I_{dcmaxc})	615 A		738 A	
Maximum DC Input Current for Each Module ($I_{dcmax,m}$)	123 A		123 A	
Number of DC Inputs Pairs	5		6	
DC Connection Type (both positive and negative polarity)	6x185mm ² (M10) +4x300mm ² (M10)		6x185mm ² (M10) +6x300mm ² (M10)	
Input Protection				
Reverse Polarity Protection	YES, with series diode		YES, with series diode	
Input Over Voltage Protection - Varistor	1 for each input pair, Class II		1 for each input pair, Class II	
Photovoltaic Array Isolation Control, floating Neutral, floating panels	Yes, Proprietary Control ⁽⁴⁾		Yes, Proprietary Control ⁽⁴⁾	
Residual Current Protection, grounded Neutral, floating panels	Not included; dimension output ground fault device with $\Delta I=400mA/module$		Not included; dimension output ground fault device with $\Delta I=400mA/module$	
Fuse Size for Each Input Pair	125 A / 1000 V		125 A / 1000 V	
Output Side				
AC Grid Connection Type	Three phases 4W+PE	Three phases 3W+PE	Three phases 4W+PE	Three phases 3W+PE
Rated AC Power (P_{acr})	275 kW		330 kW	
Rated Grid Voltage (V_{acr})	400 V	320 V	400 V	320 V
AC Voltage Range ($V_{acmin} \dots V_{acmax}$)	320...480 V ⁽¹⁾	256...368 V ⁽¹⁾	320...480 V ⁽¹⁾	256...368 V ⁽¹⁾
Maximum Output Current (I_{acmax})	400 A	505 A	480 A	606 A
Rated Frequency (f_r)	50/60 Hz		50/60 Hz	
Frequency Range ($f_{min} \dots f_{max}$)	47...53 / 57...63 Hz ⁽²⁾		47...53 / 57...63 Hz ⁽²⁾	
Power Factor ($\cos\phi_{P_{acr}}$)	> 0.995 (adj. \pm 0.90)		> 0.995 (adj. \pm 0.90)	
Total Harmonic Distortion	< 3% (@ P_{acr})		< 3% (@ P_{acr})	
AC Connection Type (for each phase)	1 x 240 mm ² (M12)	2 x 300 mm ² (M12)	1 x 240 mm ² (M12)	2 x 300 mm ² (M12)
Output Protection				
Anti-Islanding Protection	According to local standard		According to local standard	
Output Overvoltage Protection (Varistor)	Yes, Class II		Yes, Class II	
Night Time Disconnect	Yes		Yes	
AC Circuit Breaker	50 kA		50 kA	
Operating Performance				
Maximum Efficiency (η_{max})	96.7% ⁽⁵⁾	98.0% ⁽⁵⁾	96.7% ⁽⁵⁾	98.0% ⁽⁵⁾
Weighted Efficiency (η_{EURO} / η_{CEC})	95.5% / 96.0% ⁽⁵⁾	97.7% / 97.5% ⁽⁵⁾	95.5% / 96.0% ⁽⁵⁾	97.7% / 97.5% ⁽⁵⁾
Stand-by Consumption/Night-time power loss	< 45 W	< 40 W	< 52 W	< 47 W
AC Auxiliary Supply	3 x 400 Vac +N, 50/60 Hz		3 x 400 Vac +N, 50/60 Hz	
Auxiliary Supply Consumption	< 0.29% of P_{acr}	< 0.24% of P_{acr}	< 0.28% of P_{acr}	< 0.24% of P_{acr}
Auxiliary Supply Consumption without Cooling	< 0.22% of P_{acr}	< 0.22% of P_{acr}	< 0.22% of P_{acr}	< 0.22% of P_{acr}
Inverter Switching Frequency	18 kHz		18 kHz	
Communication				
Wired Local Monitoring	PVI-USB-RS232_485 (opt.)		PVI-USB-RS232_485 (opt.)	
Remote Monitoring	PVI-AEC-EVO (opt.), AURORA-UNIVERSAL (opt.)		PVI-AEC-EVO (opt.), AURORA-UNIVERSAL (opt.)	
AURORA String Combiner	PVI-STRINGCOMB (opt.)		PVI-STRINGCOMB (opt.)	
User Interface	16 characters x 2 line LCD display for each module		16 characters x 2 line LCD display for each module	
Environmental				
Ambient Temperature Range	-10...+ 60°C/+14...140°F with derating above 50°C/122°F		-10...+ 60°C/+14...140°F with derating above 50°C/122°F	
Relative Humidity	0...95% non condensing		0...95% non condensing	
Noise Emission	< 75 db (A) @ 1 m	< 72 db (A) @ 1 m	< 78 db (A) @ 1 m	< 75 db (A) @ 1 m
Maximum Operating Altitude without Derating	1000 m / 3280 ft		1000 m / 3280 ft	
Physical				
Environmental Protection Rating	IP 20		IP 20	
Cooling	Air Forced		Air Forced	
Required Air Cooling Flow	6800 m ³ /h - 4012 CFM	4800 m ³ /h - 2832 CFM	7600 m ³ /h - 4484 CFM	5600 m ³ /h - 3304 CFM
Dimension (H x W x D)	2184mm x 1250mm x 850mm / 86.0" x 49.2" x 33.5" 1215mm x 1250mm x 870mm / 47.8" x 49.2" x 34.3" (Transf.)	2184mm x 1250mm x 850mm / 86.0" x 49.2" x 33.5"	2184mm x 1250mm x 850mm / 86.0" x 49.2" x 33.5" 1215mm x 1250mm x 870mm / 47.8" x 49.2" x 34.3" (Transf.)	2184mm x 1250mm x 850mm / 86.0" x 49.2" x 33.5"
Weight	< 1600 kg / 3527 lb	< 1000 kg / 2205 lb	< 1750 kg / 3858 lb	< 1150 kg / 2535 lb
Weight of the module	< 60 kg / 132 lb		< 60 kg / 132 lb	
Safety				
Transformer	Yes	No	Yes	No
Marking	CE		CE	
Safety and EMC Standard	EN 50178, EN61000-6-2, EN61000-6-4, EN61000-3-11, EN61000-3-12		EN 50178, EN61000-6-2, EN61000-6-4, EN61000-3-11, EN61000-3-12	
Grid Standard	Enel Guideline, CEI-0-16 ⁽³⁾ , Attachment A70 Terna ⁽³⁾ , BDEW, RD 1663		Enel Guideline, CEI-0-16 ⁽³⁾ , Attachment A70 Terna ⁽³⁾ , BDEW, RD 1663	

1. The AC voltage range may vary depending on specific country grid standard

2. The Frequency range may vary depending on specific country grid standard

3. Since their applicability dates

4. Missing symmetry with respect to ground results in AC disconnection (disable function by default)

5. Power consumption of the auxiliary services not included

Remark. Features not specifically listed in the present data sheet are not included in the product

www.power-one.com

Power-One Renewable Energy Worldwide Sales Offices

<u>Country</u>	<u>Name/Region</u>	<u>Telephone</u>	<u>Email</u>
Australia	Asia Pacific	+61 2 9735 3111	sales.australia@power-one.com
China (Shenzhen)	Asia Pacific	+86 755 2988 5888	sales.china@power-one.com
China (Shanghai)	Asia Pacific	+86 21 5505 6907	sales.china@power-one.com
India	Asia Pacific	+65 6896 3363	sales.india@power-one.com
Singapore	Asia Pacific	+65 6896 3363	sales.singapore@power-one.com
Belgium / The Netherlands / Luxembourg	Europe	+32 2 206 0338	sales.belgium@power-one.com
France	Europe	+33 (0) 141 796 140	sales.france@power-one.com
Germany	Europe	+49 7641 955 2020	sales.germany@power-one.com
Italy	Europe	00 800 00287672 Opt. n°5	sales.italy@power-one.com
Spain	Europe	+34 91 879 88 54	sales.spain@power-one.com
United Kingdom	Europe	+44 1903 823 323	sales.UK@power-one.com
Dubai	Middle East	+971 50 100 4142	sales.dubai@power-one.com
Canada	North America	+1 877 261-1374	sales.canada@power-one.com
USA East	North America	+1 877 261-1374	sales.usaeast@power-one.com
USA Central	North America	+1 877 261-1374	sales.usacentral@power-one.com
USA West	North America	+1 877 261-1374	sales.usawest@power-one.com