

Hi-MO **X10** Explorer

LR7-72HVD

635~645M

- Ottimizzato per la generazione distribuita
- L'efficienza più alta con la migliore performance di generazione elettrica
- il wafer TaiRay e la tecnologia BC bifacciale garantiscono la più alta affidabilità del prodotto
- L'innovativo design "soft breakdown" protegge le celle da surriscaldamenti localizzati



garanzia di 15 anni di prodotto



Garanzia lineare di 30 anni
sulla potenza in uscita

Set completo di certificazioni di prodotto
e di sistema

IEC 61215, IEC 61730

ISO9001:2015: ISO Quality Management System

ISO14001: 2015: ISO Environment Management System

ISO45001: 2018: Occupational Health and Safety

IEC62941: Guideline for module design qualification and type approval

LONGI



23.9%
EFFICIENZA
MASSIMA

0~3%
TOLLERANZA
DI POTENZA

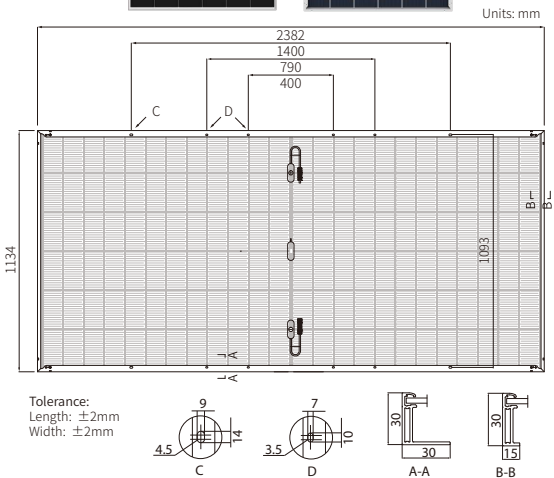
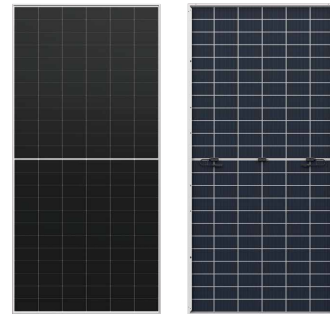
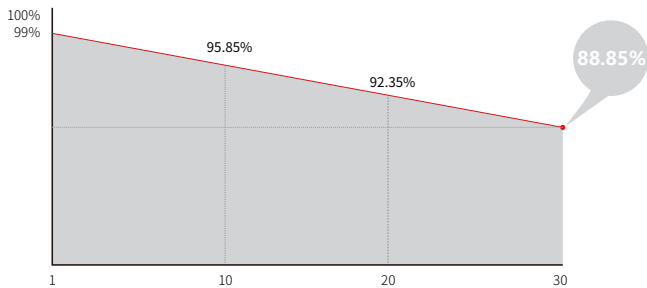
<1%
DEGRADAZIONE
AL PRIMO ANNO

0.35%
DEGRADAZIONE A
PARTIRE DAL 2 ANNO

BC-CELL
TEMPERATURA
OPERATIVA RIDOTTA

Valore Aggiunto

Garanzia di potenza 30 anni



Parametri Meccanici

Orientamento Celle	144 (6×24)
Junction Box	IP68
Cavo	4mm ² , +400, -200mm/±1400mm Lunghezza customizzabile
Vetro	Vetro semitemprato antiriflesso 2.0+2.0 mm
Cornice	Anodizzata in lega di Alluminio
Peso	33.5kg
Dimensioni	2382×1134×30mm
Packaging	36pcs per pallet / 144pcs per 20' GP / 720pcs per 40' HC

Caratteristiche Elettriche

STC : AM1.5 1000W/m² 25°C

NOCT : AM1.5 800W/m² 20°C 1m/s

Incertezza di misura su Pmax: $\pm 3\%$

Tipo di modulo	LR7-72HVD-635M		LR7-72HVD-640M		LR7-72HVD-645M	
	STC	NOCT	STC	NOCT	STC	NOCT
Condizioni di test	STC	NOCT	STC	NOCT	STC	NOCT
Potenza di picco (Pmax/W)	635	483.4	640	487.2	645	491.0
Voltaggio a vuoto (Voc/V)	53.92	51.24	54.02	51.34	54.12	51.43
Corrente di corto circuito (Isc/A)	14.89	11.96	14.98	12.03	15.06	12.10
Voltaggio al MPP (Vmp/V)	44.57	42.36	44.67	42.45	44.77	42.55
Corrente al MPP (Imp/A)	14.25	11.42	14.33	11.49	14.41	11.55
Efficienza del modulo (%)	23.5		23.7		23.9	

Caratteristiche elettriche a diverse condizioni di guadagno di potenza dal retro (Riferimento a 645 W frontali)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
677	54.12	15.81	44.77	15.13	5%
710	54.12	16.57	44.77	15.85	10%
744	54.22	17.32	44.87	16.57	15%
776	54.22	18.07	44.87	17.29	20%
808	54.22	18.83	44.87	18.01	25%

Parametri Operativi

Temperatura Operativa	-40°C ~ +85°C
Tolleranza sulla potenza in output	0 ~ 3%
Tensione massima di sistema	DC1500V (IEC/UL)
Fusibile in serie	30A
NOCT	45±2°C
Classe di isolamento	Class II
Fattore di Bifaccialità	70±5%
Rating internazionale fuoco	UL type 29 IEC Class C

Carico Meccanico

Massimo carico frontale statico	5400Pa
Massimo carico statico sul retro	2400Pa
Resistenza alla grandine	25mm di diametro a 23m/s

Coefficienti Termici (STC)

Coefficiente termico di Isc	+0.050%/°C
Coefficiente termico di Voc	-0.200%/°C
Coefficiente termico di Pmax	-0.260%/°C

1PH 3000TLM-V3/1PH 6000TLM-V3

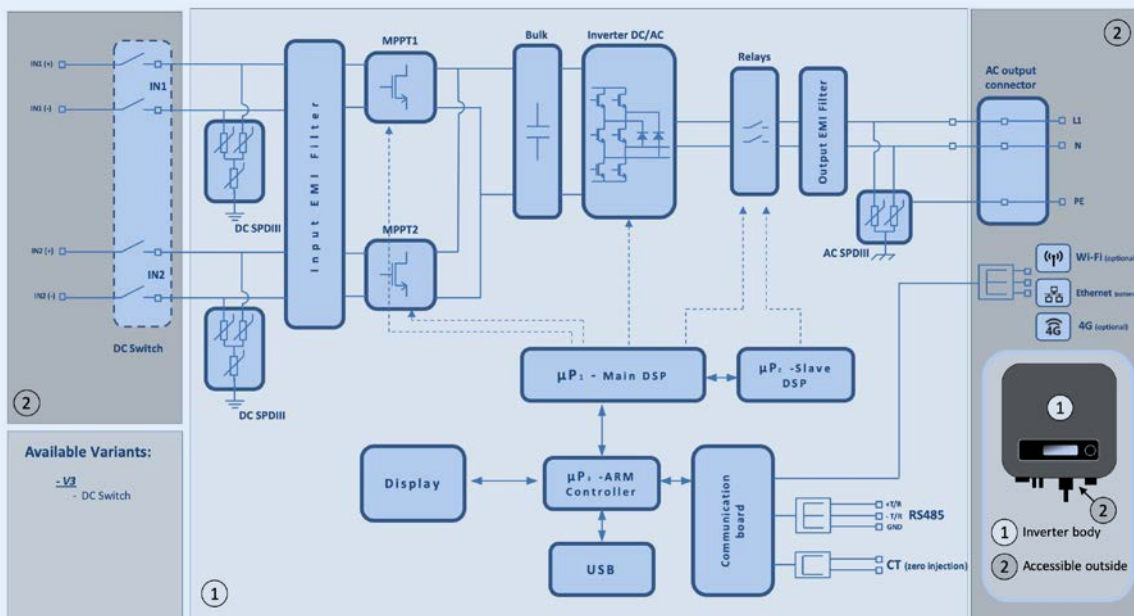
Single-phase string inverter



- » Maximum yield 98.4%
- » Dual MPPT channel
- » Fast and safe installation with all required parts included
- » Ultra compact
- » 5 or 10 year ZCS warranty
- » Wide input operating range from 80V to 550V



BLOCK DIAGRAM



TECHNICAL DATA	1PH 3000-TLM-V3	1PH 3680-TLM-V3	1PH 4000-TLM-V3	1PH 4600-TLM-V3	1PH 5000-TLM-V3	1PH 6000-TLM-V3
DC Input data						
Typical DC power*	3300W	4048W	4400W	5060W	5500W	6600W
Maximum power for channel	3000W (200V-500V)		3500W (230V-500V)		3750W (250V-500V)	4500W (300V-500V)
No. of independent MPPTs / No. of strings per MPPT				2/1		
Maximum DC input voltage				600V		
Start-up voltage				90V		
Nominal DC input voltage				380V		
MPPT DC voltage range				80V-550V		
DC voltage range at full load	200V-500V				210V-500V	260V-500V
Maximum input current for each MPPT				15A/15A		
Maximum absolute current for each MPPT				22.5A/22.5A		
AC Output data						
Rated AC power	3000W	3680W	4000W	4600W	5000W	6000W
Maximum AC power	3300VA	3680VA	4400VA	4600VA	5500VA	6600VA
Maximum AC current	15A	16A	20A	23A	25A	29A
Connection type/Rated grid voltage	Single-phase L/N/PE / 220V,230V,240V					
Grid voltage range	180V~276V (according to the local grid standards)					
Rated grid frequency	50Hz/60Hz					
Grid frequency range	45Hz~55Hz / 54Hz~66Hz (according to the local grid standards)					
Total harmonic distortion	<3%					
Power factor	1 (programmable +/-0.8)					
Active power adjustment range (settable)	0~100%					
Grid feed-in limit	Feed-in adjustable from zero to nominal power value**					
Efficiency						
Maximum efficiency	98.2%				98.4%	
Weighted efficiency (EURO)	97.3%				97.5%	
MPPT efficiency	>99.9%					
Consumption at night	<1W					
Protections						
Internal interface protection	Yes					
Safety protections	Anti-islanding, RCMU, Ground Fault Monitoring					
Reverse polarity protection DC	Yes					
DC circuit breaker	Integrated					
Overheating protection	Yes					
Overvoltage category/Protection class	Overvoltage Category III / Protection class I					
Integrated dischargers	AC/DC MOV: Type 3 standard					
Standard						
EMC	EN 61000-6-2/3, EN 61000-3-2/3/11/12					
Safety standard	IEC 62116, IEC 61727, IEC 61683, IEC 60068-1/2/14/30, IEC 62109-1/2					
Grid connection standard	Connection certificates and standards available at www.zcsazzurro.com					
Communication						
Communication interfaces	Wi-Fi/4G/Ethernet (optional), RS485 (proprietary protocol), USB, Bluetooth					
Additional inputs or connections	Input for current sensor connection					
General data						
Allowable ambient temperature range	-30°C...+60°C (power limit above 45°C)					
Topology	Transformerless					
Environmental protection class	IP65					
Allowable relative humidity range	0%.....95% non-condensing					
Maximum operating altitude	4000m					
Noise level	< 25dB @ 1mt					
Weight	9.2 kg				10 kg	
Cooling	Natural convection					
Dimensions (H x L x D)	349mmx344mmx164mm					
Data monitoring	LCD Display + APP					
Warranty	5 or 10 years (NB: the extended warranty can be obtained by registering on the EXTENDED WARRANTY section of the zcsazzurro.com website)					

* The typical DC power does not represent a maximum applicable power limit. The online configurator available at www.zcsazzurro.com will provide any applicable configurations.

** Possible by connecting a current sensor (ZST-ACC-TA) or using a specific meter