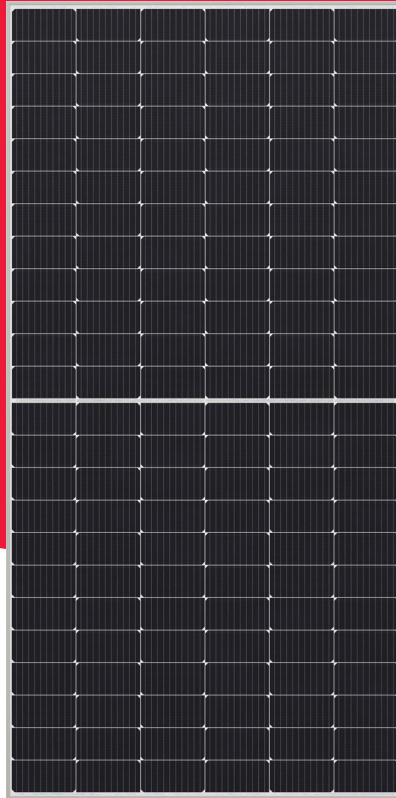


NU-JD Series

NU-JD545 / 550


545 / 550 W


The Project Solution




Powerful product features


+% Guaranteed positive power tolerance (0/+5 %)


 Module efficiency 21.1 / 21.3 %
PERC monocrystalline silicon photovoltaic modules

 Max. system voltage 1,500 V
Lower BOS costs by longer strings

MBB MBB busbar technology
Improved reliability
Higher efficiency
Reduced series resistance

 Half-cut cell
Improved shading performance
Lower internal losses
Reduced hot spot risk

 Tested and certified
VDE, IEC/EN61215, IEC/EN61730
Safety class II, CE
Fire rating class C

 Robust product design
PID resistance test passed
Salt mist test passed (IEC61701)
Ammonia test passed (IEC62716)
Dust and sand test passed (IEC60068)

Your solar partner for life

60 YEARS 60 years of solar expertise

 Local support team in Europe

25 YEARS Linear power output guarantee

50 MIL 50 million PV modules installed

10* YEARS Product guarantee

1 TIER Tier 1 - BloombergNEF



Energy Solutions

SHARP
Be Original.

* Applicable for modules installed in countries as shown in the guarantee conditions.

Electrical data (STC)

		NU-JD545	NU-JD550	
Maximum power	P_{max}	545	550	W_p
Open-circuit voltage	V_{oc}	50.54	50.70	V
Short-circuit current	I_{sc}	13.73	13.81	A
Voltage at point of maximum power	V_{mpp}	41.83	42.02	V
Current at point of maximum power	I_{mpp}	13.03	13.09	A
Module efficiency	η_m	21.1	21.3	%

STC = Standard Test Conditions: irradiance 1,000 W/m², AM 1.5, cell temperature 25 °C.
 Rated electrical characteristics are within ±10 % of the indicated values of I_{sc} , V_{oc} and 0 to +5 % of P_{max} .
 Reduction of efficiency from an irradiance change of 1,000 W/m² to 200 W/m² ($T_{module} = 25$ °C) is less than 3 %.

Electrical data (NMOT)

		NU-JD545	NU-JD550	
Maximum power	P_{max}	408.72	412.46	W_p
Open-circuit voltage	V_{oc}	47.90	48.05	V
Short-circuit current	I_{sc}	11.13	11.20	A
Voltage at point of maximum power	V_{mpp}	39.00	39.17	V
Current at point of maximum power	I_{mpp}	10.48	10.53	A

NMOT = Nominal Module Operating Temperature: 42.5 °C, irradiance 800 W/m², air temperature of 20 °C, wind speed of 1 m/s.

Mechanical data

Length	2,278 mm
Width	1,134 mm
Depth	35 mm
Weight	27.5 kg

Temperature coefficient

P_{max}	-0.341 %/°C
V_{oc}	-0.262 %/°C
I_{sc}	0.054 %/°C

Limit values

Maximum system voltage	1,500 V DC
Over-current protection	25 A
Temperature range	-40 to 85 °C
Max. mechanical load (snow/wind)	2,400 Pa
Tested snow load (IEC61215 test pass*)	5,400 Pa

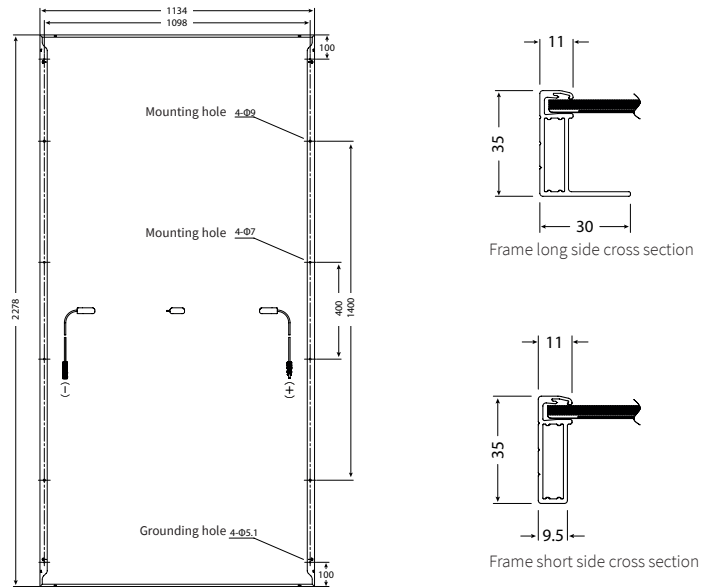
Packaging data**

Modules per pallet	31 pcs
Pallet size (L × W × H)	2.31 m × 1.13 m × 1.25 m
Pallet weight	Approx. 945 kg

**Special offloading requirements, please refer to QR code or: www.sharp.eu/NUJD-offloading



Dimensions (mm)



*Please refer to SHARP's installation manual for details.

General data

Cells	Half-cut cell mono, 182 mm x 91 mm, MBB, 2 strings of 72 cells in series
Front glass	Anti-reflective high transmissive low iron tempered glass, 3.2 mm
Backsheet	White
Frame	Anodized aluminium alloy, silver
Cable	Ø 4.0 mm ² , length 1,750 mm [or on request (+) 397 mm, (-) 50 mm]
Connection box	IP68 rating, 3 bypass diodes
Connector	C1, IP68

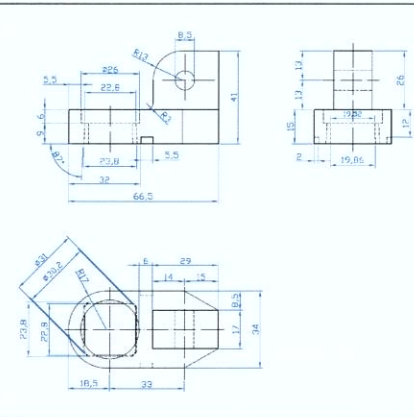
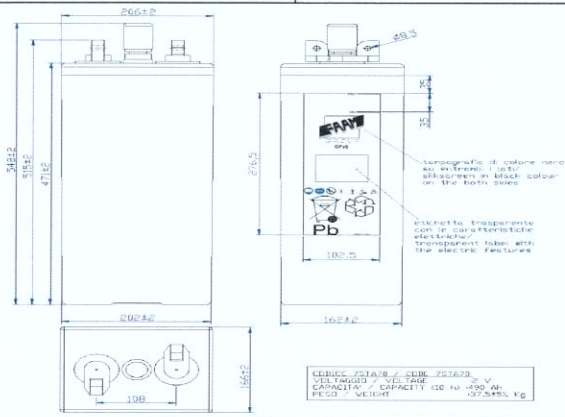
Note: Technical data is subject to change without prior notice. Before using SHARP products, please request the latest data sheets from SHARP. SHARP accepts no responsibility for damage to devices which have been equipped with SHARP products on the basis of unverified information. The specifications may deviate slightly and are not guaranteed. Installation and operating instructions are to be found in the corresponding handbooks, or can be downloaded from www.sharp.eu. This module should not be directly connected to a load.



7STA70

PHYSICAL SPECIFICATION

Nominal Voltage		2V
Nominal Capacity (10Hr)		490Ah
Dimension	Length	166 ±2mm
	Width	206 ±2mm
	Container Height	518 ±2mm
	Total Height	548 ±2mm
Drawing 400188-0		Weight 37,5 Kg ± 5%
Standard Terminal		Bolt Type: S 8

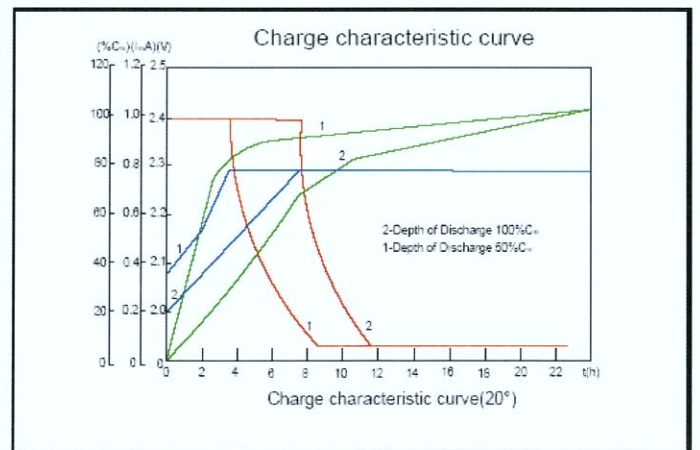


ELECTRICAL SPECIFICATION

Characteristics

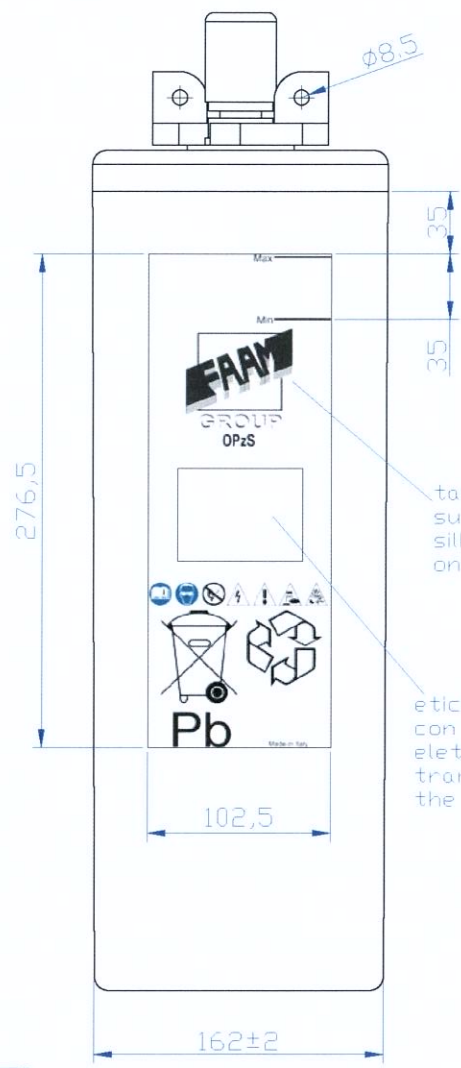
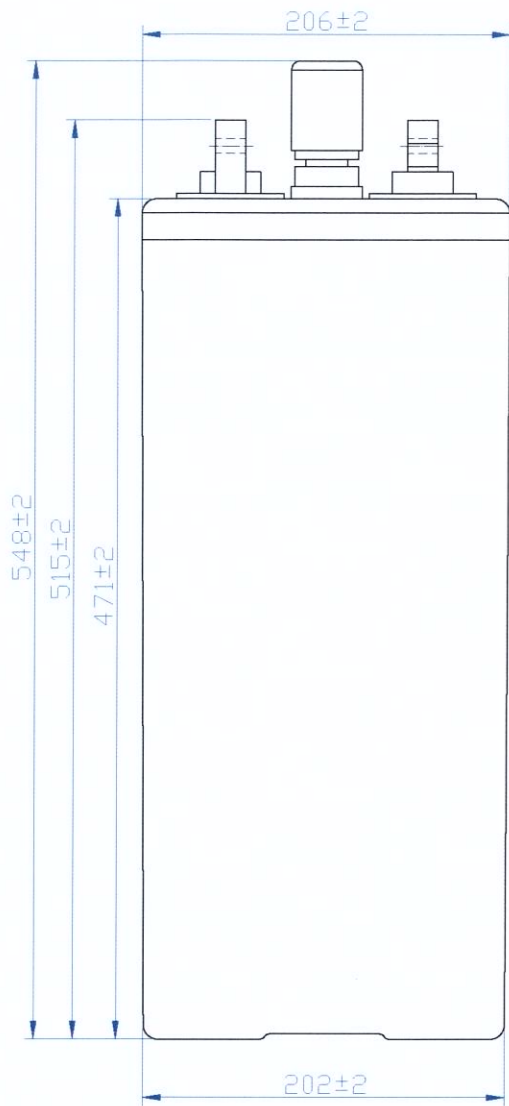
Capacity	10 hour rate	490,00Ah
	8 hour rate	479,84Ah
	5 hour rate	418,45Ah
	3 hour rate	381,75Ah
	1 hour rate	266,36Ah
Capacity affected by temperature	40°C	102%
	20°C	100%
	0°C	85%
Internal Resistance 0,38 mΩ±10%		SCC 5880 A ±10%
Charge Voltage	Standby	Max Charge Current 100 A Floating Voltage 2,23V at 20°C Bost Charge 2,40V at 20°C Temperature Coefficient -20 mV/°C

Charging curves @ 20°C



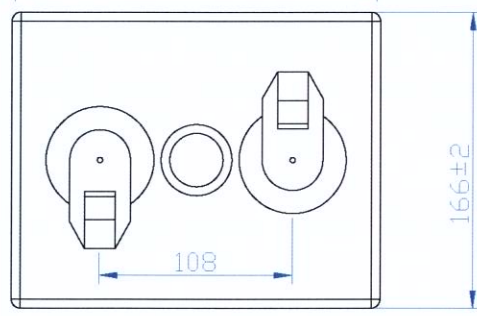
Constant Current(Amp) and Constant Power (Watt/Cell) Discharge Table at 20°C

Time		30 min	60 min	90 min	2 h	3 h	5 h	8 h	10 h	100 h	120 h
1,65V	A	363,09	259,70	202,70	172,54	132,06	88,71	61,74	51,45	6,66	5,65
	W	713,39	472,31	361,97	305,76	229,45	159,87	114,20	92,61	12,02	10,20
1,70V	A	343,54	251,94	198,70	169,13	127,25	87,88	61,15	50,96	6,72	5,70
	W	680,21	456,44	349,27	295,39	222,99	159,12	113,66	92,05	11,97	10,16
1,80V	A	279,30	221,97	181,79	154,74	120,05	83,69	58,80	49,00	6,46	5,48
	W	553,01	396,90	317,52	273,00	208,59	150,82	107,43	88,20	11,63	9,87



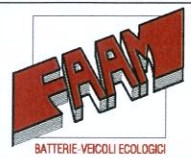
tampografia di colore nero su entrambi i lati/
silkscreen in black colour on the both sides

etichetta trasparente con le caratteristiche elettriche/
transparent label with the electric features



CODICE 7STA70 / CODE 7STA70:
VOLTAGGIO / VOLTAGE : 2 V
CAPACITA' / CAPACITY (10 h) : 490 Ah
PESO / WEIGHT : 37,5±5% Kg

1	14.02.2011	R. PARENTI	S. BALDASSARRI	R. ISIDORI	INSERITA TAMPOGRAFIA/ADDED PRINTING		
REV.	DATA/DATE	PROGETTISTA/DESIGNER	DISEGNATO/DRAWN	APPROVATO/APPROVED	DESCRIZIONE MODIFICHE/DESCRIPTION REVISIONS		
INDICAZIONI GENERALI/GENERAL INDICATION:			MATERIALE/MATERIAL:	R (N/nm2)	DUREZZA/HARDNESS:	PROGETTISTA/DESIGNER:	
GRADO DI PRECISIONE/DEGREE OF ACCURACY			Pb-acide			R. PARENTI	
NORMA UNI 5307/STANDARD UNI 5307			PROGETTO GENERALE-COMPLESSIVO/GENERAL PLAN-TOTAL PLAN:			DISEGNATO/DRAWN:	
			ELEMENTI STAZIONARI ACIDO LIBERO/STATIONARY CELLS OPZS			S. BALDASSARRI	
SOSTITUISCE IL/SUPERSEDES:		SOSTITUITO DAL/SUPERSEDS BY:	NOME FILE/NAME FILE:			APPROVATO/APPROVED:	
			4 00188-1.dwg			F. PAGLIARINI	
SCALA/SCALE:		FOGLIO/SHEET:	CODICE/COE:	TIPO/TYPE:	VERSIONE/VERSION:	DATA/DATE:	
1:4		A4	7STA70	VASO APERTO/OPZS	CARICA/CHARGE	07.11.2006	
DENOMINAZIONE/PART DESCRIPTION:						DISEGNO N°-REV./DRAWING N°-REV.:	TAV.
ELEMENTO STAZIONARIO ACIDO LIBERO COD. 7STA70/ STATIONARY CELL OPZS CODE 7STA70						4 00188-1	1



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