



PV Panel Sub-system

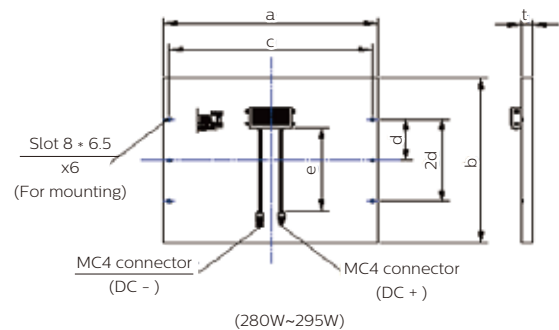
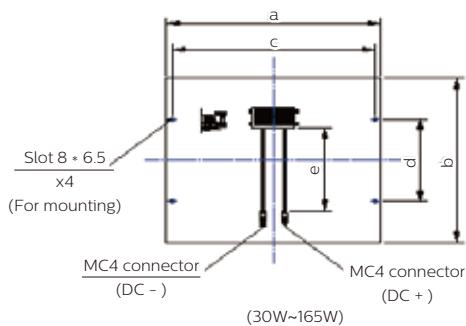
-Panel 30W-295W



Designed for Philips Solar Lighting System; PV Panel sub-system include panel and connectors; Solar Panel utilizes poly-crystalline and mono-crystalline silicon solar cells that combines high Wp (Watts Peak) output, affordability and efficiency.

Features

- Robust quality managed by Philips quality discipline, supplied by world class manufacturers
- Customization available
- Plug and play design for easy connection and installation



PV Panel Sub-system

-Connectors



Features, advantages & benefits

- With excellent aging resistance and UV endurance, it can be used in harsh environment.
- High current
- Environmentally sealed to IP67
- Ambient temperature range: -40~+85°C
- Field serviceable contact removal system
- Simple crimp-and-poke application
- Tactile and audible mating feedback

Specifications



Module Type	Type No.	Power Output (Pmax W)	Current at Pmax (Imp)	Voltage at Pmax (Vmp)	Short circuit current (Isc)	Open circuit voltage (Voc)	Operating Temp (°C)	Max. wind load (Pa)	efficiency
35W 17.5V Panel subsystem	YL35P-17b 1/4	35	1.94	18.0	2.08	22.3	-40 to 85	2.4K	12.80%
45W 17.5V Panel subsystem	YL45P-17b 1/3	45	2.53	17.8	2.72	22	-40 to 85	2.4K	12.60%
55W 17.5V Panel subsystem	YL55P-17b 2/5	55	3.08	17.8	3.28	22.1	-40 to 85	2.4K	13.20%
70W 17.5V Panel subsystem	YL70P-17b 1/2	70	3.89	18.0	4.15	22.3	-40 to 85	2.4K	13.80%
85W 17.5V Panel subsystem	YL85P-17b 3/5	85	4.71	18.1	4.99	22.4	-40 to 85	2.4K	14.30%
95W 17.5V Panel subsystem	YL95P-17b 2/3	95	5.23	18.2	5.59	22.5	-40 to 85	2.4K	14.30%
120W 17.5V Panel subsystem	YL120P-17b 4/5	120	6.8	17.7	7.36	22.7	-40 to 85	2.4K	14.30%
145W 17.5V Panel subsystem	YL145P-17b	145	7.99	18.2	8.47	22.5	-40 to 85	2.4K	14.50%
175W 35V Panel subsystem	YL175P-35b 3/5	175	4.8	36.4	5.06	45.07	-40 to 85	2.4K	15.00%
190W 35V Panel subsystem	YL190P-35b 2/3	190	5.23	36.4	5.59	45	-40 to 85	2.4K	14.70%
285W 35V Panel subsystem	YL285P-35b	285	8.02	35.5	8.5	45.3	-40 to 85	5.4K	14.60%
290W 35V Panel subsystem	YL290P-35b	290	8.1	36.3	8.62	45.3	-40 to 85	5.4K	14.90%
295W 35V Panel subsystem	YL295P-35b	295	8.12	36.3	8.63	45.3	-40 to 85	5.4K	15.10%

Module Type	Cell type (quantity/technology)	Encapsulation materials	Net Weight (kg)	a(mm)	b(mm)	c(mm)	d(mm)	e(mm)	t(mm)
35W 17.5V Panel subsystem	36/78x78	Ethylene Vinyl Acetate(EVA)	3.27	510	535	476	295	900	25
45W 17.5V Panel subsystem	36/156x52	Ethylene Vinyl Acetate(EVA)	4.23	660	540	626	280	900	25
55W 17.5V Panel subsystem	36/156x62.4	Ethylene Vinyl Acetate(EVA)	4.79	660	630	626	315	900	25
70W 17.5V Panel subsystem	36/156x78	Ethylene Vinyl Acetate(EVA)	6.2	660	770	626	390	900	25
85W 17.5V Panel subsystem	36/156x93.6	Ethylene Vinyl Acetate(EVA)	6.61	660	900	626	450	900	25
95W 17.5V Panel subsystem	36/156x104	Ethylene Vinyl Acetate(EVA)	7.65	660	1010	626	510	900	25
120W 17.5V Panel subsystem	36/124.8x156	Ethylene Vinyl Acetate(EVA)	9.31	660	1270	631	630	900	25
145W 17.5V Panel subsystem	36/156x156	Ethylene Vinyl Acetate(EVA)	10.81	680	1470	646	870	900	25
175W 35V Panel subsystem	72/156x93.6	Ethylene Vinyl Acetate(EVA)	13.5	990	1182	956	682	900	35
190W 35V Panel subsystem	72/156x104	Ethylene Vinyl Acetate(EVA)	14.1	990	1310	946	680	900	40
285W 35V Panel subsystem	72/156x156	Ethylene Vinyl Acetate(EVA)	26.8	990	1970	946	577	1200	50
290W 35V Panel subsystem	72/156x156	Ethylene Vinyl Acetate(EVA)	26.8	990	1970	946	577	1200	50
295W 35V Panel subsystem	72/156x156	Ethylene Vinyl Acetate(EVA)	26.8	990	1970	946	577	1200	50

All the data above are tested in the below environment: AM=1.5, E=1000W/m², Tc=25°C

Order information

Description	12NC	Description	12NC
35W 17.5V Panel subsystem	911401866601	145W 17.5V Panel subsystem	911401866101
45W 17.5V Panel subsystem	911401866401	175W 35V Panel subsystem	911401866001
55W 17.5V Panel subsystem	911401865901	190W 35V Panel subsystem	911401866201
70W 17.5V Panel subsystem	911401816401	285W 35V Panel subsystem	911401820001
85W 17.5V Panel subsystem	911401866301	290W 35V Panel subsystem	911401819801
95W 17.5V Panel subsystem	911401866501	295W 35V Panel subsystem	911401819901
120W 17.5V Panel subsystem	911401816701		

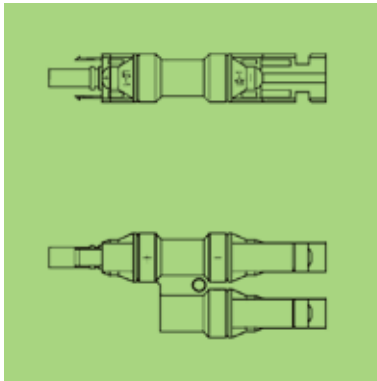


Cable Sub-system

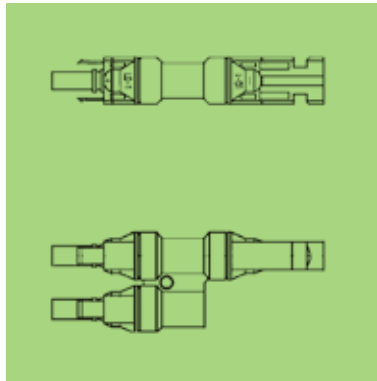
-PV Cable Sub-system

PV cable sub-system is for connecting PV panel and Charge Controller, Plug and Play connector ensures the easy wiring, IP67 protection.

Triplet (2 male plugs and 1 female plug)



Triplet (1 male plug and 2 female plugs)



PV Panel Cable



Specifications



Cable	4mm ²
Maximum working voltage	DC1000V
Rated Current	30A
Flame class	UL94-V0
Shell Protection degree	IP67
Cable	4mm ²
Ambient temperature range	-40~+85°C
Safety Level	Class II
Insertion force	≤50N
Withdrawal force	≤50N
Cable length	12.5m/11m/ 7.5m

Order information

Description	12NC	Cable length (m)	Triplet
12.5m/4mm ² PV cable w/o 2to1 connector	911401817601	12.5	No
11m/4mm ² PV cable w/o 2to1 connector	911401817301	11	No
7.5m/4mm ² PV cable w/o 2to1 connector	911401817201	7.5	No
12.5m/4mm ² PV cable with 2to1 connector	911401817101	12.5	Yes
11m/4mm ² PV cable with 2to1 connector	911401817001	11	Yes
7.5m/4mm ² PV cable with 2to1 connector	911401816901	7.5	Yes
6m/4mm ² PV cable with 2to1 connector	911401826401	6	Yes
6m/4mm ² PV cable w/o 2to1 connector	911401826501	6	No
3.5m/4mm ² PV cable w/o 2to1 connector	911401826601	3.5	No
3.5m/4mm ² PV cable with 2to1 connector	911401826701	3.5	Yes

Panel extension cable



Luminaire extension cable



Order information

Description	12NC
2x4mm 2 Panel extension 1m cable	444100083071
2x4mm 2 Panel extension 2m cable	444100083081
2x4mm 2 Panel extension 3m cable	444100083091
2x2.5mm 2 Luminaire extension 1m cable	444100046871
2x2.5mm 2 Luminaire extension 2m cable	444100083051
2x2.5mm 2 Luminaire extension 3m cable	444100083061
01030015 2 batteries with 2 luminaires	911401803201
01030011 2 batteries to panel connection	911401803301