

# SunGen® Photovoltaic Wire

XLPE, RHH/RHW-2, VW-1, RPVU90, FT1  
2000 V, UL Type PV, Single Conductor, Copper



**Product Construction:**

**Conductor:**

- 12 AWG thru 1000 kcmil bare compressed copper. Class B per ASTM B8
- 12 AWG thru 8 AWG bare copper, compressed, Class B stranding per ASTM B33 and B8
- 12 AWG thru 8 AWG tinned coated compressed copper. Class C stranding per ASTM B33 and B8

**Insulation:**

- Flame-retardant Cross-linked Polyethylene (XLPE), black

**Print:**

- GENERAL CABLE® (PLANT OF MFG) SUNGEN® 2000 V PV WIRE DIR BUR OR RHH OR RHW-2 (SIZE) XLPE 90°C WET OR DRY SUN RES (UL) -40°C VW-1 OR C(UL) 2000 V RPVU90 FT1 MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

**Options:**

- Bare or tinned copper conductors
- Other stranding options are available upon request
- Now available in colors
- Available in UL 1685 CT Flame rated ≥ 1/0 AWG RHW-2

**Applications:**

- Single conductor, sunlight-resistant, direct burial photovoltaic wire rated 90°C wet or dry, 2000 V for interconnection wiring of grounded and ungrounded photovoltaic power systems as described in Section 690.31(A) and other applicable parts of the National Electrical Code® (NEC), NFPA 70

**Features:**

- Rated 90°C wet and dry
- Rated for direct burial
- Deformation-resistant at high temperatures
- Excellent moisture resistance, exceeds UL 44
- Stable electrical properties over a broad temperature range
- Increased flexibility
- Excellent resistance to crush and compression cuts
- UV/sunlight-resistant
- Meets cold bend and cold impact tests at -40°C

**Compliances:**

- Industry Compliances:**
- UL 4703 Type PV, UL File # E343277
  - c(UL) CSA C22.2 No. 271 RPVU90 File # E343277
  - National Electrical Code (NEC®)
  - UL 44 Type RHW-2, UL File # E39406
- Flame Test Compliances:**
- UL 1581 VW-1
- Other Compliances:**
- EPA 40 CFR, Part 261 for leachable lead content per TCLP
  - OSHA Acceptable
  - RoHS Compliant

**Packaging:**

- Material cut to length and shipped on non-returnable wood reels

CATALOG NUMBER	COND. SIZE (AWG/kcmil)	NUMBER OF WIRES	COLOR	NOMINAL CONDUCTOR O.D.		MIN. AVG. INSULATION THICKNESS		NOMINAL CABLE DIAMETER		COPPER WEIGHT		NET WEIGHT	
				IN	mm	IN	mm	IN	mm	LBS/1000 FT	kg/km	LBS/1000 FT	kg/km

**12 AWG - 1000 kcmil BARE COPPER CONDUCTORS**

5851.711200B	12	19/.0185	Black	0.088	2.24	0.075	1.91	0.238	6.05	20	30	38	57
5851.711209B	12	19/.0185	White	0.088	2.24	0.075	1.91	0.238	6.05	20	30	37	55
5851.711202B	12	19/.0185	Red	0.088	2.24	0.075	1.91	0.238	6.05	20	30	37	55
426400	10	19/.0234	Black	0.112	2.84	0.075	1.91	0.262	6.65	32	48	53	79
439410	10	19/.0234	White	0.112	2.84	0.075	1.91	0.262	6.65	32	48	52	77
439400	10	19/.0234	Red	0.112	2.84	0.075	1.91	0.262	6.65	32	48	52	77
426300	8	19/.0295	Black	0.143	3.63	0.085	2.16	0.313	7.95	51	76	80	119
439430	8	19/.0295	White	0.143	3.63	0.085	2.16	0.313	7.95	51	76	79	118
439420	8	19/.0295	Red	0.143	3.63	0.085	2.16	0.313	7.95	51	76	79	118
5851.710600B*	6	19/.0372	Black	0.180	4.57	0.085	2.16	0.350	8.89	81	121	114	170
5851.710400B*	4	19/.0469	Black	0.235	5.97	0.085	2.16	0.405	10.29	129	192	169	251
5851.710200B*	2	19/.0591	Black	0.296	7.52	0.085	2.16	0.466	11.84	205	305	253	377
5851.710100B*	1	19/.0664	Black	0.322	8.18	0.105	2.67	0.532	13.51	258	384	327	487
5851.715100B*	1/0	19/.0745	Black	0.362	9.19	0.105	2.67	0.572	14.53	326	485	402	598
5851.715200B*	2/0	19/.0837	Black	0.405	10.29	0.105	2.67	0.615	15.62	411	612	494	735
5851.715300B*	3/0	19/.0940	Black	0.456	11.58	0.105	2.67	0.666	16.92	518	771	611	909
5851.715400B*	4/0	19/.1055	Black	0.512	13.00	0.105	2.67	0.722	18.34	653	972	756	1125
5851.716250B*	250	37/.0822	Black	0.558	14.17	0.120	3.05	0.798	20.27	772	1149	901	1341
5851.716300B*	300	37/.0900	Black	0.611	15.52	0.120	3.05	0.851	21.62	926	1378	1066	1586
5851.716350B*	350	37/.0972	Black	0.661	16.79	0.120	3.05	0.901	22.89	1063	1582	1232	1833
5851.716400B*	400	37/.1040	Black	0.706	17.93	0.120	3.05	0.946	24.03	1235	1838	1396	2077
5851.716500B*	500	37/.1159	Black	0.789	20.04	0.120	3.05	1.029	26.14	1544	2298	1723	2564
5851.716600B*	600	61/.0992	Black	0.866	22.00	0.135	3.43	1.136	28.85	1853	2758	2074	3086
5851.716750B*	750	61/.1109	Black	0.968	24.59	0.135	3.43	1.238	31.45	2316	3447	2564	3816
5851.717000B*	1000	61/.1280	Black	1.117	28.37	0.135	3.43	1.387	35.23	3088	4595	3376	5024

**12 AWG - 8 AWG BARE COPPER, 7 STRAND CONDUCTORS**

5851.711200B7*	12	7/.0305	Black	0.088	2.24	0.075	1.91	0.238	6.05	20	30	38	57
5851.711209B7*	12	7/.0305	White	0.088	2.24	0.075	1.91	0.238	6.05	20	30	37	55
5851.711202B7*	12	7/.0305	Red	0.088	2.24	0.075	1.91	0.238	6.05	20	30	37	55
406400	10	7/.0385	Black	0.112	2.84	0.075	1.91	0.262	6.65	32	48	53	79
406400.09	10	7/.0385	White	0.112	2.84	0.075	1.91	0.262	6.65	32	48	52	77
406400.02	10	7/.0385	Red	0.112	2.84	0.075	1.91	0.262	6.65	32	48	52	77
426600*	8	7/.0481	Black	0.143	3.63	0.085	2.16	0.313	7.95	51	76	80	119
426600.09*	8	7/.0481	White	0.143	3.63	0.085	2.16	0.313	7.95	51	76	79	118
426600.02*	8	7/.0481	Red	0.143	3.63	0.085	2.16	0.313	7.95	51	76	79	118

**12 AWG - 8 AWG TINNED COPPER CONDUCTORS**

439630*	12	19/.0185	Black	0.088	2.24	0.075	1.91	0.238	6.05	20	30	38	57
5851.711209*	12	19/.0185	White	0.088	2.24	0.075	1.91	0.238	6.05	20	30	37	55
5851.711202*	12	19/.0185	Red	0.088	2.24	0.075	1.91	0.238	6.05	20	30	37	55
426450*	10	19/.0234	Black	0.112	2.84	0.075	1.91	0.262	6.65	32	48	53	79
5851.711109*	10	19/.0234	White	0.112	2.84	0.075	1.91	0.262	6.65	32	48	52	77
5851.711102*	10	19/.0234	Red	0.112	2.84	0.075	1.91	0.262	6.65	32	48	52	77
426650*	8	19/.0295	Black	0.143	3.63	0.085	2.16	0.313	7.95	51	76	80	119
5851.710809*	8	19/.0295	White	0.143	3.63	0.085	2.16	0.313	7.95	51	76	79	118
5851.710802*	8	19/.0295	Red	0.143	3.63	0.085	2.16	0.313	7.95	51	76	79	118

Dimensions and weights are nominal; subject to industry tolerances.  
\* Non-stock item; minimum runs apply. Please contact Customer Service for price and delivery.



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