

## SOLAR CABLES

U-PV / H1Z2Z2-K 1/1 kV AC

EN 50618

Halogen Free, Flame Retardant, Low Smoke, UV Resistant



### »» Construction

- ❶ **Conductor** : Annealed tinned bunch stranded copper in accordance with IEC 60228 Class 5
- ❷ **Insulation** : Cross-linked compound in accordance with EN 50618 Table B.1
- ❸ **Outer Jacket** : Cross-linked compound in accordance with EN 50618 Table B.1

### »» Technical Features

<b>Rated Voltage</b>	: 1/1 kV AC
<b>Max. Operating Voltage</b>	: 1,2/1,2 kV, AC (EN 50618, Annex A)
<b>Test Voltage</b>	: AC 6,5 kV ( 5 min. )
<b>Current Carrying Capacity</b>	: EN 50618, Table A.3
<b>Operating Temperature</b>	: -40/120 °C
<b>Installation Temperature</b>	: -25/60 °C
<b>Cold Bend</b>	: EN 60811-504 ( -40 °C)
<b>Cold Elongation</b>	: EN 60811-505 ( -40 °C)
<b>Cold Impact</b>	: EN 60811-506 & EN 50618 ( -40 °C)
<b>Damp Heat Test</b>	: EN 50618 ( 1000h, 90 °C, %85 humidity )
<b>Halogen Free Properties</b>	: EN 50525-1, Annex B
<b>Low Smoke Emission</b>	: EN 61034-2 ( Light Transmittance >%60)
<b>Flame Retardancy</b>	: EN 60332-1-2
<b>Weather Resistance</b>	: EN 50618 , Annex E
<b>Acid and Alkaline Resistance</b>	: EN 50618 , Annex B
<b>Min. Bending Radius</b>	: EN 50565-1 ( 4xD For Fixed Installations, D:cable outer diameter)
<b>Shrinkage Test</b>	: EN 50618, Table 2
<b>Durability of Print</b>	: EN 50618

### »» Application

ÜNİKA U-PV Solar Cables are designed for use in Photovoltaic Power Supply Systems both for indoor and/or outdoor solar energy applications.

## U-PV / H1Z2Z2-K 1/1 kV AC CABLE DATA SHEET

Item	Cross-section (mm <sup>2</sup> )	Max. Conductor Diameter (mm)	Outer Diameter (mm)		Weight (approx.) (kg/km)	Max. Conductor DC Resistance at 20 °C (Ω/km)	Max. Current Carrying Capacity (Air) CT at 120 °C AT at 60 °C (A)	Max. Current Carrying Capacity (Surface) CT at 120 °C AT at 60 °C (A)
			Nom.	Max.				
1.	1 x 1,5	1,8	4,5	5,4	30	13,7	30	29
2.	1 x 2,5	2,4	4,9	5,9	40	8,21	41	39
3.	1 x 4	3,0	5,4	6,6	56	5,09	55	52
4.	1 x 6	3,9	6,0	7,4	75	3,39	70	67
5.	1 x 10	5,1	6,9	8,8	115	1,95	98	93
6.	1 x 16	6,3	8,1	10,1	172	1,24	132	125
7.	1 x 25	7,8	10,9	12,5	273	0,795	176	167
8.	1 x 35	9,2	12,3	14,0	367	0,565	218	207
9.	1 x 50	11,0	14,1	16,3	512	0,393	276	262
10.	1 x 70	13,1	16,4	18,7	730	0,277	347	330
11.	1 x 95	15,1	18,1	20,8	919	0,21	416	395
12.	1 x 120	17,0	19,9	22,8	1141	0,164	488	464
13.	1 x 150	19,0	22,6	25,5	1454	0,132	566	538
14.	1 x 185	21,0	25,1	28,5	1771	0,108	644	612
15.	1 x 240	24,0	28,2	32,1	2280	0,0817	775	736

CT: Conductor Temperature

AT: Ambient Temperature