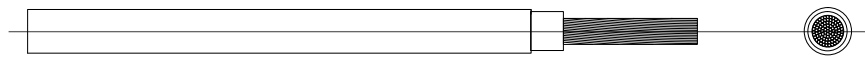


# TOPSOLAR<sup>®</sup> PV H1Z2Z2-K

TÜV solar PV cable.

BASED ON: EN 50618 / IEC 62930 / UTE C 32-502

## DESIGN



### Conductor

Class 5 (flexible) tinned copper, based on EN 60228 and IEC 60228.

### Insulation

Low smoke zero halogen (LSHF) cross linked rubber insulation.

### Outer sheath

Low smoke zero halogen (LSHF) cross linked rubber outer sheath, red or black colour.

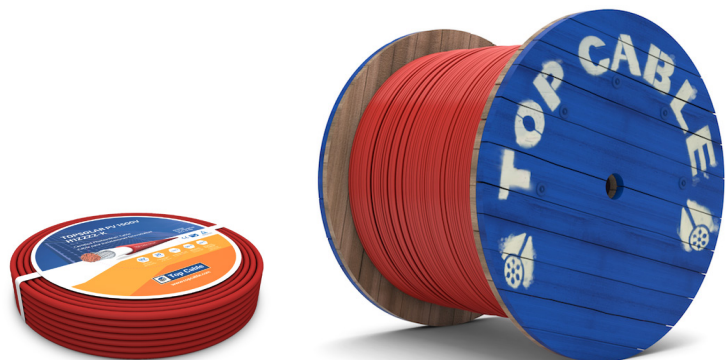
## APPLICATIONS

The Topsolar<sup>®</sup> PV H1Z2Z2-K cable, which is TÜV certified according to IEC 62930 and EN 50618, is suitable for both fixed and mobile solar installations (solar farms, rooftop solar installations and floating plants).

It is a highly flexible cable compatible with all major connectors and specially designed for the connection of photovoltaic panels. This versatile single-conductor cable is designed to meet the varying needs of the solar industry. Suitable for wet, damp and humid locations.

- Solar PV installations - string cable.

PV WIRE ALSO  
AVAILABLE



More information at: [www.topcable.com](http://www.topcable.com)

TOP CABLE TOPSOLAR PV H1Z2Z2-K

## FEATURES



### Electrical performance

Low voltage 1,5/1,5 1kV (1,8) kV DC.  
1,0/1,0 kV ( $U_0/U$ ).



### Based on

EN 50618/ IEC 62930 / UTE C 32-502.



### Standards and approvals

TÜV / RETIE / RoHS / CE.



### CPR (Construction Products Regulation)

$C_{ca}$  -s1b, d2, a1.



### Thermal performance

Maximum service temperature: 120°C.  
Maximum short-circuit temperature: 250°C (max. 5 s).  
Minimum service temperature: -40°C (fixed and protected installations).



### Fire performance

Flame non-propagation based on EN 60332-1 and IEC 60332-1-2.  
Fire non-propagation based on EN 50399.  
Reaction to fire CPR:  $C_{ca}$  -s1b, d2, a1, according to EN 50575.  
LSHF (Low Smoke Zero Halogen) based on UNE-EN 60754-1 and IEC 60754-1.  
Low smoke emission based on EN 61034 and IEC 61034: Light transmittance > 60%.  
Low corrosive gases emission based on UNE-EN 60754-2 and IEC 60754-2.



### Mechanical performance

Minimum bending radius: x5 cable diameter.  
Impact resistance: AG2 Medium severity.



### Chemical performance

Chemical & Oil resistance: Excellent.  
Grease & mineral oils resistance: Excellent.  
**UV** UV Resistant based on EN 50618.  
**O<sub>3</sub>** Ozone resistant based on EN 50618.




### Water performance

Water presence: AD8 submerged.



### Other

Meter by meter marking.  
Estimated lifetime 25 years based on EN 50618.  
 Optional: rodent proof and termite proof.



### Installation conditions

Open Air.  
Buried.  
On conduit.



### Packaging

Available in rolls (lengths of 100 m) and reels.

## SOLAR CABLES



TOPSOLAR® PV  
H1ZZZ2-K



TOPSOLAR® PV  
H1ZZZ2-K DUAL



TOPSOLAR® PV  
AL 1500 V



TOPSOLAR® PV  
AL 2kV PV WIRE

## DECLARATION OF PERFORMANCE DECLARACIÓN DE PRESTACIONES

DoP Nr/ n°: **TC054** Rev.1



**Code of the product-type / Código de producto tipo:**  
TOPSOLAR PV C H1Z2Z2-K

**Identification of the product / Identificación del producto de construcción:**  
H1Z2Z2-K full range according to EN 50618

**Intended use/s: / Uso/s previsto/s:**

Supply of electricity in buildings and other civil engineering works with the objective of limiting the generation and spread of fire and smoke. Power Cables.

*Suministro de electricidad en edificios y otras obras de ingeniería civil con el objetivo de limitar la generación y propagación de fuego y humo. Cables de potencia.*

**Authorized representative: / Representante autorizado:** N/A

**System/s of AVCP: / Sistema/s de EVCP:**

System 1+ / Sistema 1+

**Harmonized standard: / Norma armonizada:**

EN 50575:2014 and EN 50575:2014/A1: 2016

**Notified body/ies: / Organismo/s notificado/s:**

AENOR – 0099

**Manufacturer / Fabricante:**

TOP CABLE S.A.  
Leonardo da Vinci, 1  
08191 Rubí (Barcelona) SPAIN  
Tel. +34 93 588 09 11  
Fax: +34 93 588 04 11  
Email: [ventas@topcable.com](mailto:ventas@topcable.com)

Notified product certification body issued the Certificate of Constancy of Performances for characteristics of reaction to fire.

*Organismo notificado de certificación de producto que ha emitido el Certificado de Constancia de las Prestaciones para las características de reacción al fuego.*

**Declared performances: / Prestaciones declaradas:**

Essential characteristics / Características esenciales

Reaction to fire / Reacción al fuego

Dangerous substances / sustancias peligrosas

Performance / Prestaciones

**C<sub>ca</sub> - s1b, d2, a1**

NPD (Non Performance declaration / Prestación no determinada)

The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

*Las prestaciones del producto identificado anteriormente son conformes con el conjunto de prestaciones declaradas. La presente declaración de prestaciones se emite, de conformidad con el Reglamento (UE) n° 305/2011, bajo la responsabilidad exclusiva del fabricante arriba identificado.*

**Signed for and on behalf of the manufacturer by / Firmado por y en nombre del fabricante por:**

Felipe DIAZ RUBIO,  
Technical Department



Rubí (Barcelona) Spain, 30/04/2020

# Zertifikat

# Certificate



Zertifikat Nr. *Certificate No.*  
R 60113828

Blatt *Page*  
0001

Ihr Zeichen *Client Reference*

Unser Zeichen *Our Reference*

Ausstellungsdatum

*Date of Issue*

0010--21243325 001

13.10.2016

*(day/mo/yr)*

Genehmigungsinhaber *License Holder*

TOP CABLE S.A.  
P.A.E. Can Sant Joan  
Leonardo da Vinci 1  
08191 Rubi - Barcelona  
Spain

Fertigungsstätte *Manufacturing Plant*

AKAN Cables S.L.  
P.L. Plans de la Sala, Parcela 11  
08650 Barcelona  
Spain

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*

EN 50618:2014



Zertifiziertes Produkt (Geräteidentifikation)

*Certified Product (Product Identification)*

Lizenzentgelte - Einheit

*License Fee - Unit*

PV-Cables

Identification: TOPSOLAR PV H1Z2Z2-K  
Code designation: H1Z2Z2-K  
Rated diameter: 2,5 mm<sup>2</sup>; 4,0 mm<sup>2</sup>; 6,0 mm<sup>2</sup>;  
10,0 mm<sup>2</sup>; 16,0 mm<sup>2</sup>; 25,0 mm<sup>2</sup>  
Rated voltage: AC U<sub>0</sub>/U 1,0/1,0 kV  
Rated voltage: DC 1500 V (conductor-conductor and  
conductor-earth)  
Max. permitted voltage: DC 1,8 kV  
Light transmission: 82,1 %  
Ambient temperature: -40 °C to +90 °C  
max. Core temperature: +120 °C @ 20.000 h  
Material of Insulation: Halogene Free thermosetting rubber  
Material of Sheath: Halogene Free thermosetting rubber  
Colour of Sheath: black

16

16

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.  
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com  
Fax: +49 221 806-3935 http://www.tuv.com/safety



Guido Volberg

# Zertifikat

# Certificate



Zertifikat Nr. *Certificate No.*  
R 60113828

Blatt *Page*  
0002

Ihr Zeichen *Client Reference*

Unser Zeichen *Our Reference*  
0010--21243325 002

Ausstellungsdatum  
29.11.2016

*Date of Issue*  
(day/mo/yr)

**Genehmigungsinhaber *License Holder***

TOP CABLE S.A.  
P.A.E. Can Sant Joan  
Leonardo da Vinci 1  
08191 Rubi - Barcelona  
Spain

**Fertigungsstätte *Manufacturing Plant***

AKAN Cables S.L.  
P.L. Plans de la Sala, Parcela 11  
08650 Barcelona  
Spain

**Prüfzeichen *Test Mark***



**Geprüft nach *Tested acc. to***  
EN 50618:2014

**Zertifiziertes Produkt (Geräteidentifikation)  
*Certified Product (Product Identification)***

**Lizenzentgelte - Einheit  
*License Fee - Unit***

PV-Cables

as page 0001  
Amendment

additional Colour of sheath: RED

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.  
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

**TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg**

Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com  
Fax: +49 221 806-3935 http://www.tuv.com/safety

Zertifizierungsstelle



Guido Volberg

## DECLARATION OF PERFORMANCE DECLARACIÓN DE PRESTACIONES

DoP Nr/ n°: **TC054** Rev.1



**Code of the product-type / Código de producto tipo:**  
TOPSOLAR PV C H1Z2Z2-K

**Identification of the product / Identificación del producto de construcción:**  
H1Z2Z2-K full range according to EN 50618

**Intended use/s: / Uso/s previsto/s:**

Supply of electricity in buildings and other civil engineering works with the objective of limiting the generation and spread of fire and smoke. Power Cables.

*Suministro de electricidad en edificios y otras obras de ingeniería civil con el objetivo de limitar la generación y propagación de fuego y humo. Cables de potencia.*

**Authorized representative: / Representante autorizado:** N/A

**System/s of AVCP: / Sistema/s de EVCP:**

System 1+ / Sistema 1+

**Harmonized standard: / Norma armonizada:**

EN 50575:2014 and EN 50575:2014/A1: 2016

**Notified body/ies: / Organismo/s notificado/s:**

AENOR – 0099

**Manufacturer / Fabricante:**

TOP CABLE S.A.  
Leonardo da Vinci, 1  
08191 Rubí (Barcelona) SPAIN  
Tel. +34 93 588 09 11  
Fax: +34 93 588 04 11  
Email: [ventas@topcable.com](mailto:ventas@topcable.com)

Notified product certification body issued the Certificate of Constancy of Performances for characteristics of reaction to fire.

*Organismo notificado de certificación de producto que ha emitido el Certificado de Constancia de las Prestaciones para las características de reacción al fuego.*

**Declared performances: / Prestaciones declaradas:**

Essential characteristics / Características esenciales

Reaction to fire / Reacción al fuego

Dangerous substances / sustancias peligrosas

Performance / Prestaciones

**C<sub>ca</sub> - s1b, d2, a1**

NPD (Non Performance declaration / Prestación no determinada)

The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

*Las prestaciones del producto identificado anteriormente son conformes con el conjunto de prestaciones declaradas. La presente declaración de prestaciones se emite, de conformidad con el Reglamento (UE) n° 305/2011, bajo la responsabilidad exclusiva del fabricante arriba identificado.*

**Signed for and on behalf of the manufacturer by / Firmado por y en nombre del fabricante por:**

Felipe DIAZ RUBIO,  
Technical Department



Rubí (Barcelona) Spain, 30/04/2020