



# GridLink Power & Control Cables for Smart Grid Communication Systems

Armoured & EMC Protected Multicore Low Smoke Zero Halogen Cables • 600/1000V



## Document Information

**Datat Sheet Number** LCM240124A-V1  
**Date** 24/01/2024  
**Notes / Changelog** First Release

## Cable Construction

### Conductor

Stranded Tinned or Plain Annealed Copper  
 (IEC 60228 Class 2 and 5)

### Insulation

Extruded XLPE (Crosslinked Polyethylene) Type GP8 to BS 7655

### Lay Up

Multiple Cores Laid Up with Fillers where Required

### Collective Screen

Tinned Annealed Copper Wire Braid Screen  
 (≥85% Optical Coverage)

### Inner Sheath

Extruded LSZH (Low Smoke Zero Halogen) to BS 7655 LTS1-4,  
 IEC 60092 SHF1, EN 50363 TM7

### Armouring

Galvanised Steel Single Wire Armour  
 (In accordance with BS EN 10257-1)

### Outer Sheath

Extruded LSZH (Low Smoke Zero Halogen) to BS 7655 LTS1-4,  
 IEC 60092 SHF1, EN 50363 TM7

## Colours & Identification

### Core Colours (2 to 5 Cores)

To Requirement. Available in Individual Colours  
 or Single Colour with Printed Numbers.

### Core Colours (7 Cores +)

To Requirement. Available in Single Colour with  
 Printed Numbers.

### Inner Sheath Colour

Black

### Outer Sheath Colour

Black

## Standards & Properties

### Design Standards

Generally to IEC 60092-353  
 IEC 60092-350  
 IEC 60092-360  
 IEC 60502-1

### Electrical

Voltage Rating 600/1000 V

### Temperature

Max Conductor Temperature 90 °C  
 Operating Temperature Range -15 to 70 °C

### Physical

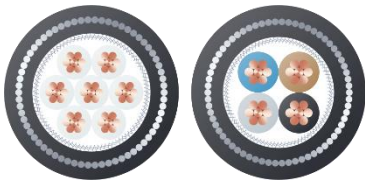
Minimum Bend Radius 6 x OD

### Fire Performance

Flame Retardance IEC 60332-1-2  
 Flame Retardance IEC 60332-3-22 (Cat A)  
 Halogen Gas Content IEC 60754-1  
 Gas Acidity IEC 60754-2  
 Smoke Emission IEC 61034

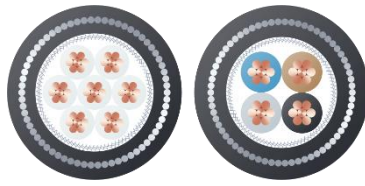
## Nominal Dimensions

See Tables



## 1.5mm² Smart Grid Power &amp; Control Cables

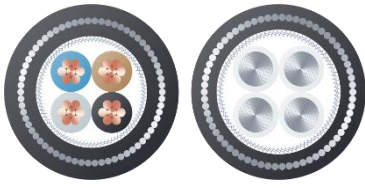
No of Cores	Conductor CSA (mm²)	Conductor Metal	Conductor Stranding (#/mm)	Insulation Ø (mm)	Braid Wire Ø (mm)	Inner Sheath Ø (mm)	Armour Wire Ø (mm)	Outer Sheath Ø (mm)	Conductor Resistance (Ω/km)
2	1.5	PAC	7/0.53	2.99	0.2	9.08	0.87	13.22	12.10
3	1.5	PAC	7/0.53	2.99	0.2	9.56	0.87	13.70	12.10
4	1.5	PAC	7/0.53	2.99	0.2	10.34	0.87	14.68	12.10
5	1.5	PAC	7/0.53	2.99	0.2	11.17	0.87	15.51	12.10
7	1.5	PAC	7/0.53	2.99	0.2	12.07	0.87	16.41	12.10
12	1.5	PAC	7/0.53	2.99	0.2	15.54	1.21	20.96	12.10
19	1.5	PAC	7/0.53	2.99	0.2	18.05	1.54	24.33	12.10
27	1.5	PAC	7/0.53	2.99	0.2	21.52	1.54	28.20	12.10
37	1.5	PAC	7/0.53	2.99	0.2	24.03	1.94	31.71	12.10



## 2.5mm² Smart Grid Power &amp; Control Cables

No of Cores	Conductor CSA (mm²)	Conductor Metal	Conductor Stranding (#/mm)	Insulation Ø (mm)	Braid Wire Ø (mm)	Inner Sheath Ø (mm)	Armour Wire Ø (mm)	Outer Sheath Ø (mm)	Conductor Resistance (Ω/km)
2	2.5	PAC	7/0.67	3.41	0.2	9.92	0.87	14.26	7.41
3	2.5	PAC	7/0.67	3.41	0.2	10.47	0.87	14.81	7.41
4	2.5	PAC	7/0.67	3.41	0.2	11.35	0.87	15.69	7.41
5	2.5	PAC	7/0.67	3.41	0.2	12.31	0.87	16.85	7.41
7	2.5	PAC	7/0.67	3.41	0.2	13.33	1.21	18.55	7.41
12	2.5	PAC	7/0.67	3.41	0.2	17.29	1.21	22.91	7.41
19	2.5	PAC	7/0.67	3.41	0.2	20.15	1.54	26.63	7.41
27	2.5	PAC	7/0.67	3.41	0.2	24.11	1.94	31.79	7.41
37	2.5	PAC	7/0.67	3.41	0.2	26.97	1.94	34.85	7.41




 4mm<sup>2</sup> to 35mm<sup>2</sup> Smart Grid Power & Control Cables

No of Cores	Conductor CSA (mm <sup>2</sup> )	Conductor Metal	Conductor Stranding (#/mm)	Insulation Ø (mm)	Braid Wire Ø (mm)	Inner Sheath Ø (mm)	Armour Wire Ø (mm)	Outer Sheath Ø (mm)	Conductor Resistance (Ω/km)
2	4	PAC	7/0.85	3.95	0.2	11.00	0.87	15.34	4.61
3	4	PAC	7/0.85	3.95	0.2	11.63	0.87	15.97	4.61
4	4	PAC	7/0.85	3.95	0.2	12.66	0.87	17.20	4.61
5	4	PAC	7/0.85	3.95	0.2	13.77	1.21	18.99	4.61
7	4	PAC	7/0.85	3.95	0.2	14.95	1.21	20.37	4.61
2	6	PAC	7/1.04	4.52	0.2	12.14	0.87	16.48	3.08
3	6	PAC	7/1.04	4.52	0.2	12.86	0.87	17.40	3.08
4	6	PAC	7/1.04	4.52	0.2	14.04	1.21	19.26	3.08
5	6	PAC	7/1.04	4.52	0.2	15.30	1.21	20.72	3.08
7	6	PAC	7/1.04	4.52	0.2	16.61	1.21	22.23	3.08
2	10	PAC	7/1.35	5.45	0.2	14.00	1.21	19.22	1.83
3	10	PAC	7/1.35	5.45	0.2	14.87	1.21	20.29	1.83
4	10	PAC	7/1.35	5.45	0.2	16.29	1.21	21.71	1.83
5	10	PAC	7/1.35	5.45	0.2	17.82	1.54	24.10	1.83
2	16	TAC	126/0.40	6.87	0.2	16.84	1.21	22.46	1.24
3	16	TAC	126/0.40	6.87	0.2	17.94	1.54	24.22	1.24
4	16	TAC	126/0.40	6.87	0.2	19.73	1.54	26.21	1.24
5	16	TAC	126/0.40	6.87	0.2	21.65	1.54	28.33	1.24
2	25	TAC	196/0.40	8.55	0.2	20.20	1.54	26.68	0.795
3	25	TAC	196/0.40	8.55	0.2	21.57	1.54	28.25	0.795
4	25	TAC	196/0.40	8.55	0.2	23.79	1.94	31.47	0.795
5	25	TAC	196/0.40	8.55	0.2	26.19	1.94	34.07	0.795
2	35	TAC	276/0.40	9.81	0.2	22.72	1.54	29.40	0.565
3	35	TAC	276/0.40	9.81	0.2	24.29	1.94	31.97	0.565
4	35	TAC	276/0.40	9.81	0.2	26.84	1.94	34.72	0.565
5	35	TAC	276/0.40	9.81	0.2	29.99	1.94	38.07	0.565

