



# Gridlink Data Cable for Smart Grid Communication Systems

Low Smoke Zero Halogen Single Pair Modbus RS485



## Document Information

Datat Sheet Number LCM240124C-V1  
 Date 24/01/2024  
 Notes / Changelog First Release

## Cable Construction

**Conductor**  
 22 AWG Stranded Tinned Annealed Copper

**Insulation**  
 Extruded PE (Polyethylene)

**Twisting**  
 2 Cores Twisted Together to Form a Pair

**Collective Screen**  
 Aluminium/Polyester Tape Laid with Conductive Side in Contact with Tinned Annealed Copper Drain Wire

**Collective Screen 2**  
 Tinned Annealed Copper Wire Braid Screen

**Sheath**  
 Extruded LSZH (Low Smoke Zero Halogen)

## Colours & Identification

**Core Identification**  
 1 x Blue Core  
 1 x White Core

**Outer Sheath Colour**  
 Black

## Standards & Properties

**Electrical**

Voltage Rating	600	V
Maximum DC Loop Resistance	97.2	Ω/km
Nominal Impedance	120	Ω
Insulation Resistance (500V/1 min)	5	GΩ/km
Max Mutual Capacitance (800Hz Core-Core)	38	nF/km
Maximum Core to Screen Capacitance (800Hz)	69	nF/km
Nominal Inductance	0.55	mH/km

**Temperature**

Operating Temperature Range	-20 to +70	°C
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**Physical**

Minimum Bend Radius	8	x OD
Nominal Cable Weight	65	kg/km

**Fire Performance**

Flame Retardance	IEC 60332-1-2
Halogen Gas Content	IEC 60754-1
Gas Acidity	IEC 60754-2
Smoke Emission	IEC 61034

## Nominal Dimensions

Conductor Gauge	22	AWG
Conductor Cross Sectional Area	0.35	mm <sup>2</sup>
Conductor Stranding	7/0.25	mm
Outer Sheath Diameter	7.2	mm