



# **VOLTAN**

POWERING CONNECTIONS • ENERGIZING SOLUTIONS



## **Voltan RS 485 Cable**

Versatile, Scalable, and Built to Last



At Voltan Technologies, we deliver premium RS-485 cable solutions and an advanced wireless option. Our innovation allows RS-485 signals to be transmitted without traditional twisted-pair cables. By embedding our wireless modules into your devices, you get long-range, reliable communication—with the flexibility and convenience of a cable-free setup.

## TECHNICAL SPECIFICATION

- 🗝️ Pairs Available: 1 / 2 / 3 / 4
- 📏 Conductor Sizes: 18 AWG, 22 AWG, 24 AWG
- 🖋️ Insulation: Polyethylene (PE)
- 🎨 Jacket Options: LSZH (Low Smoke Zero Halogen) or PVC
- 🛡️ Screening: Aluminium/Polyester foil
- 📊 Capacitance (core-to-core): 34 / 35 / 38 / 38 pF/m (for 1–4 pairs)
- 🛠️ Impedance: 120  $\Omega$  (nominal)
- 🌡️ Operating Temperature: -25°C to +75°C
- ⚡ Voltage Rating: 300 V
- 🛡️ Standards Compliance: EN 50290-2, IEC 60228, IEC 60332-1, IEC 61034, IEC 60754-1/-2, RoHS
- 📦 Standard Length: 305 m rolls

### Certifications & Compliance

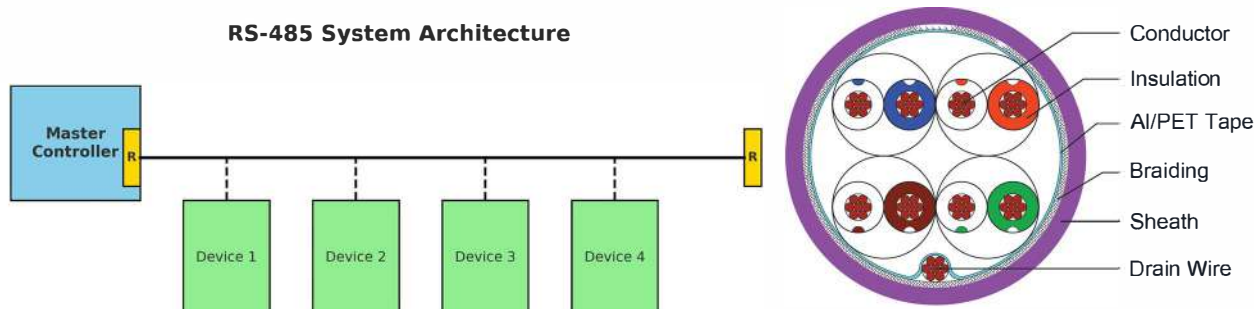
- IEC, RoHS, EN, ISO 9001 Manufacturing Standards

### FR-PVC Variant

- 📏 Conductor Sizes: 22 AWG, 24 AWG
- 🎨 Jacket Material: Flame Retardant PVC (Standard Color: Grey)
- 🛡️ Certifications: IEC 60332-1-2, IEC 60332-1-3

## INSIGHTS

RS-485 System Architecture



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# TYPICAL APPLICATIONS

Our RS-485 solutions are ideal for a wide range of uses, including:

- Factory automation
- Building Management Systems (BMS)
- HVAC control
- Security and access control
- Smart grids and utility monitoring
- Robotics and Automated Guided Vehicles (AGVs)

Additionally, our Flame Retardant PVC cables are engineered for dependable performance in EIA RS-485 computer applications.

## PRODUCT FEATURES

- **RS-485 Optimized:** 120  $\Omega$  impedance ensures stable signalling over long distances.
- **Excellent Noise Protection:** Al/PET foil + tinned copper braid with drain wire for strong shielding.
- **Safe Installation:** Halogen-free flame-retardant LSZH jacket (also available in PVC).
- **Durable & Flexible:** Stranded tinned-copper conductors; operates from -25 °C to +75 °C.
- **Easy to Install:** Color-coded twisted pairs and standard 305 m rolls.
- **High Signal Integrity:** Low-capacitance design supports reliable differential signalling.
- **Superior Shielding:** 100% aluminium/polyester tape plus copper braid guards against EMI and crosstalk.

## WHY CHOOSE OUR RS-485 CABLES?

### 1 — Precision & Performance

120  $\Omega$  impedance. Dual shielding. LSZH/HFFR safety. Stranded tinned-copper conductors. Engineered for clean signals, quick installation, and long-lasting reliability.

### 2 — Built for Clarity

Noise-free signalling. Safe for occupied spaces. Easy to install. Mechanically robust. Our RS-485 cables deliver performance you can trust.

### 3 — Smart Choice for Smart Systems

Optimised for BMS and access control with superior shielding, safety jackets, and clear coding. Designed for speed, safety, and strength.

### 4 — Signal. Safety. Simplicity.

120  $\Omega$  impedance, dual shielding, LSZH/HFFR safety, and effortless installation — engineered for dependable connections every time.

# ORDER INFORMATION

## RS-485 CABLE

### 18 AWG

18 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH	
Part No.	Description
VFST118L	RS-485 1 Pair, 18 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH
VFST218L	RS-485 2 Pair, 18 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH
VFST318L	RS-485 3 Pair, 18 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH
VFST418L	RS-485 4 Pair, 18 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH
18 AWG Tinned Copper Shielded Cable with Drain Wire, PVC	
VFST118P	RS-485 1 Pair, 18 AWG Tinned Copper Shielded Cable with Drain Wire, PVC
VFST218P	RS-485 2 Pair, 18 AWG Tinned Copper Shielded Cable with Drain Wire, PVC
VFST318P	RS-485 3 Pair, 18 AWG Tinned Copper Shielded Cable with Drain Wire, PVC
VFST418P	RS-485 4 Pair, 18 AWG Tinned Copper Shielded Cable with Drain Wire, PVC
18 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid	
VFST118LB	RS-485 1 Pair 18 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid
VFST218LB	RS-485 2 Pair 18 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid
VFST318LB	RS-485 3 Pair 18 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid
VFST418LB	RS-485 4 Pair 18 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid
18 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid	
VFST118PB	RS-485 1 Pair 18 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid
VFST218PB	RS-485 2 Pair 18 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid
VFST318PB	RS-485 3 Pair 18 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid
VFST418PB	RS-485 4 Pair 18 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid

## 22 AWG

22 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH	
VFST122L	RS-485 1 Pair, 22 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH
VFST222L	RS-485 2 Pair, 22 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH
VFST322L	RS-485 3 Pair, 22 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH
VFST422L	RS-485 4 Pair, 22 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH
22 AWG Tinned Copper Shielded Cable with Drain Wire, PVC	
VFST122P	RS-485 1 Pair, 22 AWG Tinned Copper Shielded Cable with Drain Wire, PVC
VFST222P	RS-485 2 Pair, 22 AWG Tinned Copper Shielded Cable with Drain Wire, PVC
VFST322P	RS-485 3 Pair, 22 AWG Tinned Copper Shielded Cable with Drain Wire, PVC
VFST422P	RS-485 4 Pair, 22 AWG Tinned Copper Shielded Cable with Drain Wire, PVC
22 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid	
VFST122LB	RS-485 1 Pair 22 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid
VFST222LB	RS-485 2 Pair 22 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid
VFST322LB	RS-485 3 Pair 22 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid
VFST422LB	RS-485 4 Pair 22 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid
22 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid	
VFST122PB	RS-485 1 Pair 22 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid
VFST222PB	RS-485 2 Pair 22 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid
VFST322PB	RS-485 3 Pair 22 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid
VFST422PB	RS-485 4 Pair 22 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid

## 24 AWG

24 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH	
VFST124L	RS-485 1 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH
VFST224L	RS-485 2 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH
VFST324L	RS-485 3 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH
VFST424L	RS-485 4 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH



24 AWG Tinned Copper Shielded Cable with Drain Wire, PVC	
VFST124P	RS-485 1 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, PVC
VFST224P	RS-485 2 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, PVC
VFST324P	RS-485 3 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, PVC
VFST424P	RS-485 4 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, PVC
24 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid	
VFST124LB	RS-485 1 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid
VFST224LB	RS-485 2 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid
VFST324LB	RS-485 3 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid
VFST424LB	RS-485 4 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, LSZH Braid
24 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid	
VFST124PB	RS-485 1 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid
VFST224PB	RS-485 2 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid
VFST324PB	RS-485 3 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid
VFST424PB	RS-485 4 Pair, 24 AWG Tinned Copper Shielded Cable with Drain Wire, PVC Braid

## 22 & 24 AWG FR-PVC Sheath

22 AWG Tinned Copper Shielded Cable, FR-PVC Sheath	
Part No.	Description
VFST122FPVC	RS-485 1 Pair 22 AWG Tinned Copper Shielded Cable, FR-PVC Sheath
VFST222FPVC	RS-485 2 Pair 22 AWG Tinned Copper Shielded Cable, FR-PVC Sheath
VFST322FPVC	RS-485 3 Pair 22 AWG Tinned Copper Shielded Cable, FR-PVC Sheath
VFST422FPVC	RS-485 4 Pair 22 AWG Tinned Copper Shielded Cable, FR-PVC Sheath
24 AWG Tinned Copper Shielded Cable, FR-PVC Sheath	
VFST124FPVC	RS-485 1 Pair 24 AWG Tinned Copper Shielded Cable, FR-PVC Sheath
VFST224FPVC	RS-485 2 Pair 24 AWG Tinned Copper Shielded Cable, FR-PVC Sheath
VFST324FPVC	RS-485 3 Pair 24 AWG Tinned Copper Shielded Cable, FR-PVC Sheath
VFST424FPVC	RS-485 4 Pair 24 AWG Tinned Copper Shielded Cable, FR-PVC Sheath

# VOLTAN

Voltan Technology Limited stands as a dedicated leader in the electrical and electronics manufacturing industry, with a strong footprint across diverse sectors. Recognized globally as a specialist in low voltage solutions, we operate from our headquarters in London, UK. Delivering advanced, efficient methodologies to meet the dynamic needs of our clients.

Our comprehensive portfolio includes UPS systems, LAN & Control cables, Network Racks, and IP enclosures. We are proud to support a wide array of industries, including government, hospitality, education, healthcare, utilities, media and entertainment.

## CONTACT US



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