BUS RS-485 OUTDOOR

-40°C to +80°C, 300V



Construction
Conductor: Tinned Copper · Stranded
Core Insulation: Foamed · Foam PE
Cabling: Twisted
Core Identification: Pair 1: White/Blue Stripe & Blue/White Stripe; Pair 2: White/Orange Stripe & Orange/White Stripe
Shield: Foil · Aluminum/polyester (Al/PET) foil
Drain Wire: Stranded Tinned Copper
Shield: Braid · Tinned copper braid
Jacket: Extruded · PE

Thermal Characteristics
Operating Temperature: -40°C to +80°C
Min. Installation Temperature: -20°C

Electrical Characteristics
Operating Voltage: 300V
Test Voltage: 1500V
Characteristic Impedance: 120 Ω ± 12 Ω (at 1 MHz)
Mutual Capacitance: Approx. 40 nF/km (conductor to conductor at 1 kHz)
Velocity of Propagation: Approx. 78%

Application
Outdoor Renewable and Utility Telemetry: For outdoor serial data and telemetry links across solar arrays, energy storage yards, substations and remote monitoring stations.
Fieldbus and Serial Data Networks: For differential serial and fieldbus communication links between programmable controllers, distributed I/O modules, drives and field devices.

General Characteristics
UV Resistance: Resistant to ultraviolet exposure, helping reduce surface deterioration caused by sunlight.
Weather Resistance: Resistant to weathering, helping maintain cable integrity under exposure to sunlight, moisture and changing weather conditions.
Moisture Resistance: Resistant to moisture and humidity, helping maintain the integrity of the cable covering in damp environments.
EMC Interference Shielding: Metallic shielding helps suppress electromagnetic interference and maintain signal integrity in electrically noisy environments.

Standards & Approvals
TIA/EIA-485-A: Balanced differential serial data interface.

RoHS COMPLIANT REACH COMPLIANT

CASMO Part No.	Conductor			Insulation		Min. Braid Coverage (%)	Cable		Max. DCR @20°C (Ω/km)
	Conductor Size (AWG)	No. Of Strands	Nom. Strand Dia. (mm)	Nom. Ins. Thickness (mm)	Nom. Core O.D. (mm)		Nom. Jkt. Thickness (mm)	Nom. O.D. (mm)	
12300724/7-1P-TS-BK	1P×24	7	0.20	0.55	1.70	80	1.00	6.1	94.2
12300724/7-2P-TS-BK	2P×24	7	0.20	0.55	1.70	80	1.20	8.8	94.2
12300722/7-1P-TS-BK	1P×22	7	0.25	0.65	2.05	80	1.10	7.4	59.4
12300722/7-2P-TS-BK	2P×22	7	0.25	0.65	2.05	80	1.25	9.6	59.4
12300718/16-1P-TS-BK	1P×18	16	0.25	0.80	2.80	80	1.20	8.9	26.0
12300718/16-2P-TS-BK	2P×18	16	0.25	0.80	2.80	80	1.35	11.8	26.0

Table Notes

* "-TS-" = stranded tinned copper conductor; "-1P" / "-2P" = number of twisted pairs; "-BK" = UV-stabilized black PE outer sheath (standard).

† Max. DCR @20°C is specified as guaranteed single-conductor maximum; maximum DC loop resistance equals 2 × single-conductor DCR (188.4 / 118.8 / 52.0 Ω/km for 24 / 22 / 18 AWG). Standard black PE outer sheath is designed for outdoor UV/moisture resistance and is not flame-retardant.

Product illustrations are representative only and nominal values are for reference (Cal. Com. Code § 2313); binding acceptance is governed by CASMO's order acknowledgment, signed drawing, and applicable agency scope. Standards cited without a corresponding agency mark indicate design/test reference only. Specifications are subject to change; confirm latest revision and Terms of Sale at casmocable.com/terms.

© CASMO CABLE LLC. All rights reserved. UL®, cUL®, and UL certification marks are trademarks of UL LLC; CSA® is a trademark of CSA Group; TÜV Rheinland® is a trademark of TÜV Rheinland AG.