Industrial data, fieldbus & RF cables

RA500 50Ω 1/2" DAS Coax

RA500 1/2 Inch 50 Ohm Corrugated Copper DAS Coaxial Cable

IEC 61196-4 / EN 50117 · 300 V · −55...+85 °C · Min. bend 125 mm

IEC 61196-4 / EN 50117 | 300 V



Application

IEC 61196-4 (50 Ω, -55 to +85 °C, 88% velocity) 1/2 inch annular corrugated copper RF coaxial feeder cable for cellular base stations, tunnel relays and in-building DAS.

Typical uses: Industrial automation & control cabinets, Inverter-fed motor drive systems, Process instrumentation & oil/gas skids, Machine tools & robotic cells, Data centers, stadiums & broadcast facilities

Construction





Cross-section, not to scale

1	Copper-Clad Aluminum Inner Conductor	4.80 mm Solid CCA Center Conductor
2	Closed-Cell Physical Foam PE Dielectric	12.30 mm Low-Loss Nitrogen-Foamed Polyethylene
3	Annular Corrugated Copper Outer Conductor	13.80 mm 100% RF-Sealed Corrugated Copper Tube
4	UV-Resistant Black PE Outer Jacket	16.00 mm Weatherproof Polyethylene Sheath

Technical data

Typical values

Nominal / reference voltage	300 V	Conductor & core insulation	4.80 mm Solid CCA Center Conductor · 12.30 mm Low-Loss Nitrogen-Foamed Polyethylene
Routine dielectric / continuity test	100% factory drum spark & continuity verified	Operating temperature range	−55…+85 °C
Short-circuit / peak thermal limit	+160 °C to +250 °C (5 s conductor thermal limit)	Flame & fire performance	IEC 61196-4 / EN 50117
Minimum bending radius	125 mm	Screening / armour architecture	13.80 mm 100% RF-Sealed Corrugated Copper Tube
Outer sheath material & colour	16.00 mm Weatherproof Polyethylene Sheath	Standards	IEC 61196-4 / EN 50117 / IEC 60332-1-2 / RoHS 2

Sizes

3 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Part designation	Configuration	Conductor & shield	Insulation / wall	Outer sheath	Outer diameter mm	Min. bend radius mm	Max. conductor resistance @ 20 °C Ω/km	Copper weight kg/km	Cable weight kg/km	Key electrical / op
RA500 50Ω 1/2" DAS Coax 3 sizes										
☐ RA500 1/2" Standard Outdoor Black PE	1/2" (4.80 / 12.30 / 13.80 / 16.00 mm)	4.80 mm CCA + Foam PE + Corrugated Cu Tube	12.30 mm Low-Loss Nitrogen-Foamed Polyethylene	Outdoor PE	16.0	125	1.48	118.0	225	50 ± 1 Ω · 76 pF/m
☐ RA500-LSZH 1/2" Indoor/Tunnel Flame-Retardant	1/2" (4.80 / 12.30 / 13.80 / 16.00 mm)	4.80 mm CCA + Foam PE + Corrugated Cu Tube	12.30 mm Low-Loss Nitrogen-Foamed Polyethylene	Outdoor PE	16.0	125	1.48	118.0	255	50 ± 1 Ω · 76 pF/m
☐ RA500-SF 1/2" Superflexible Helical Corrugated	1/2" Superflex (3.60 / 9.00 / 12.20 / 13.60 mm)	3.60 mm CCA + Foam PE + Helical Corrugated Cu	12.30 mm Low-Loss Nitrogen-Foamed Polyethylene	Outdoor PE	13.6	50	2.65	96.0	185	50 ± 1 Ω · 80 pF/m

– Dimensions and weights are nominal manufacturing targets subject to standard production tolerances.

Standards and approvals

- ✓ IEC 61196-4 / EN 50117 Compliant
- ✓ EN 10204 3.1 Factory Test Certificate
- ✓ CE, RoHS 2 (2011/65/EU) & REACH

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone **+86 185 9591 3361** · Email **info@tebaoflex.com** · Web **tebaoflex.com/cables/ra500-50-ohm-1-2-inch-corrugated-copper-das-coaxial-cable**

Typical values for this cable type, based on Reference specification per IEC 61196-4 / EN 50117 (RA500 50Ω 1/2" DAS Coax). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.