Coaxial cable 75 Ohm TRISET 302 B2ca class A+ 1.02/4.6/7.0 110 dB [500 m]

Code: **E1007_500**

TRISET 302 B2ca, Tri-shield type, made with LSZH jacket, intended for the construction of RTV/SAT installations. Reaction to fire class according to CPR - B2ca-s1a, d1, a1.

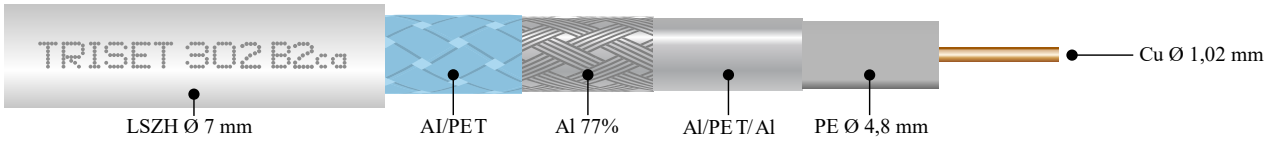
- Compliant with the class A+ standard
- Flammability class B2ca-s1a, d1, a1
- 1.02 mm copper core
- Cable with tri-shield construction - triple screen
- Made in LSZH (LS0H) jacket - halogen-free insulation
- Low attenuation
- Excellent fit
- High shielding effectiveness - in the frequency band up to 2 GHz it meets the requirement of class A++
- Min. 77% braid coverage

Details

Close-up of the Tri-Shield TRISET 302 B2ca cable.

Braid covering (aluminum) 77%.

High-quality Tri-Shield TRISET 302 B2ca E1006 coaxial cable intended for both individual and collective installations. Cable with **LSZH (LS0H) jacket - halogen-free insulation**, used where greater safety in the event of fire is needed (tall and high-rise residential buildings, public utility buildings). ***In the event of a fire, these cables do not spread flame, smoke emission is very low, and the emitted gases are not corrosive.*** They can be successfully used in DVB-T2 digital terrestrial television and FM radio installations /DAB and multiswitch systems (terrestrial DVB-T2 and satellite DVB-S/S2).



Inner conductor made of copper wire with a diameter of 1.02 mm and a triple screen (first glued Al/PET/Al foil + 77% braiding + second Al/PET foil).

Key features:

- compliant with the **class A**+ standard
- flammability class **B2ca-s1a, d1, a1**
- 1.02 mm copper core
- tri-shield cable - triple screen
- made in **LSZH (LS0H) jacket - halogen-free insulation**
- low attenuation
- excellent fit
- high shielding effectiveness - ***in the frequency band up to 2 GHz meets the requirement of class A++***
- min. 77% braid coverage

The high-quality, triple-shielded coaxial cable of RG6 category has the inner conductor made of copper wire with a diameter of 1.02 mm, which ensures low loss and durability. The copper wire core does not corrode and the cable is not stiff.

The TRISET 302 B2ca E1007 coaxial cable has 77% braid coverage, guaranteeing a high level of shielding and protecting the useful signal against the influence of external interference.

In the case of parallel installation of many cables and long cable sections, it is recommended to use triple-screened cables. Effective screening over long distances eliminates the likelihood of so-called cable crosstalk. It consists of inducing unwanted signals in neighboring cables. This is visible on the screen by image interference - pixelation and freezing of scenes - as is the case with a weak signal or a low-quality signal.

The optimally selected flexibility of the jacket allows for easy installation of the cable both in cable ducts and in installation boxes or mounting boxes.

The cable is manufactured under strict quality standards, with tight tolerances.

In order to secure the minimum bend radius, flush mounted installations should be done with the use of protective conduits.

The Tri-Shield TRISET 302 B2ca E1007 coaxial cable meets the EN50117 standard for shielding (class A+) in the frequency band 5 - 3000 MHz.

The cable has a declaration of compliance with the RoHS directive (.pdf)
Declaration of conformity of technical parameters of Tri-Shield TRISET 302 B2ca E1007 (.pdf)
Declaration of performance (.pdf)
Detailed parameters of the Tri-Shield TRISET 302 B2ca E1007 cable (.pdf)

TRISET brand cables are compliant with the directive CPR and comply with the European standard EN 50575, which specifies the requirements for fire performance, test methods and evaluation of cables as construction materials.

The 75 Ohm TRISET 302 B2ca E1007 coaxial cable was tested by the notified body TÜV Rheinland with the number **1008** and obtained **class B2ca-s1a, d1, a1 reaction to fire**.

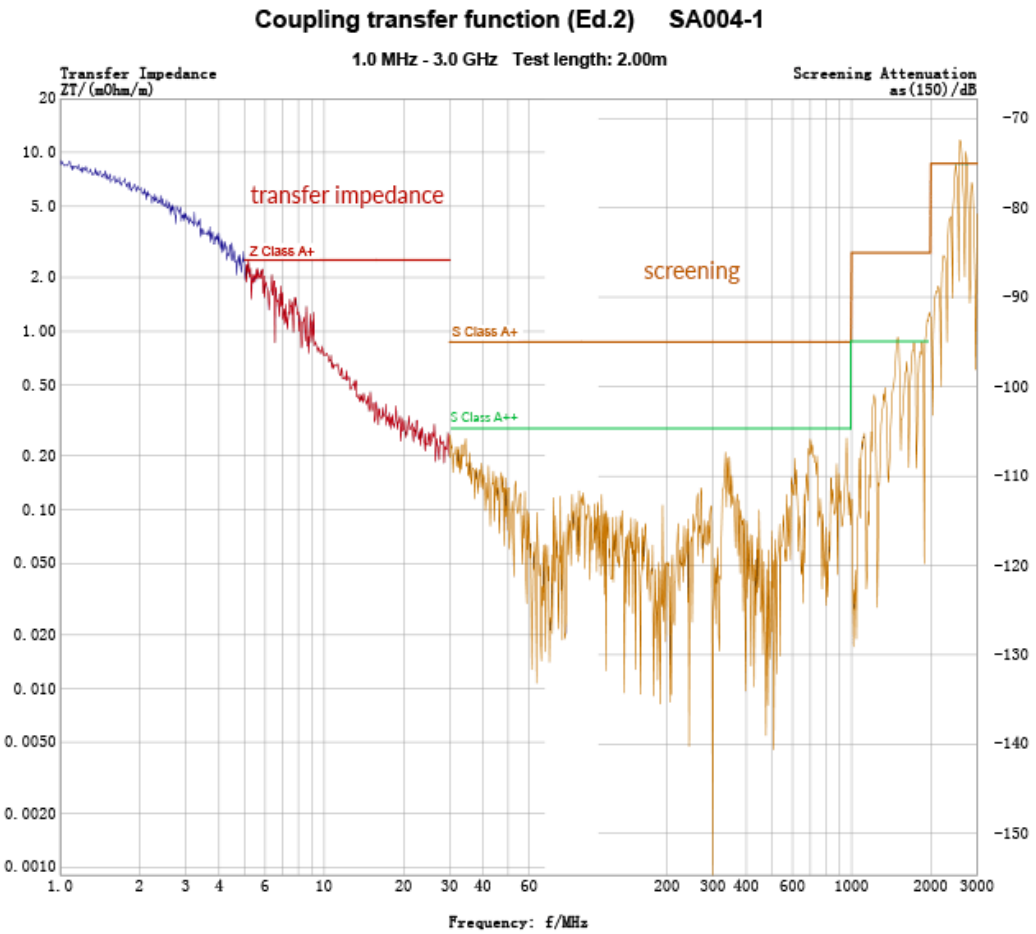
For more on cable fire resistance classes, read The CPR Directive - the new cable order

According to the EN50117 standard, coaxial cables are divided into classes: C, B, A, A+, A++, depending on the screening effectiveness.

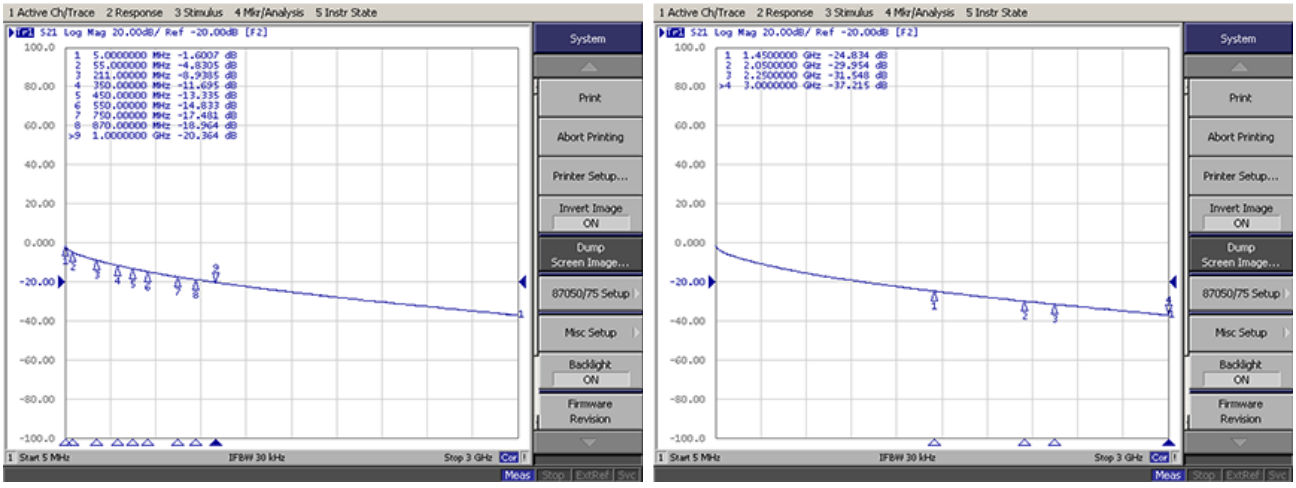
Classes of screening efficiency

Class	5-30 MHz [mΩ/m]	30-1000 MHz [dB]	1-2 GHz [dB]	2-3 GHz [dB]
C	50	75	65	55
B	15	75	65	55
A	5	85	75	65
A+	2,5	95	85	75
A++	0,9	105	95	85

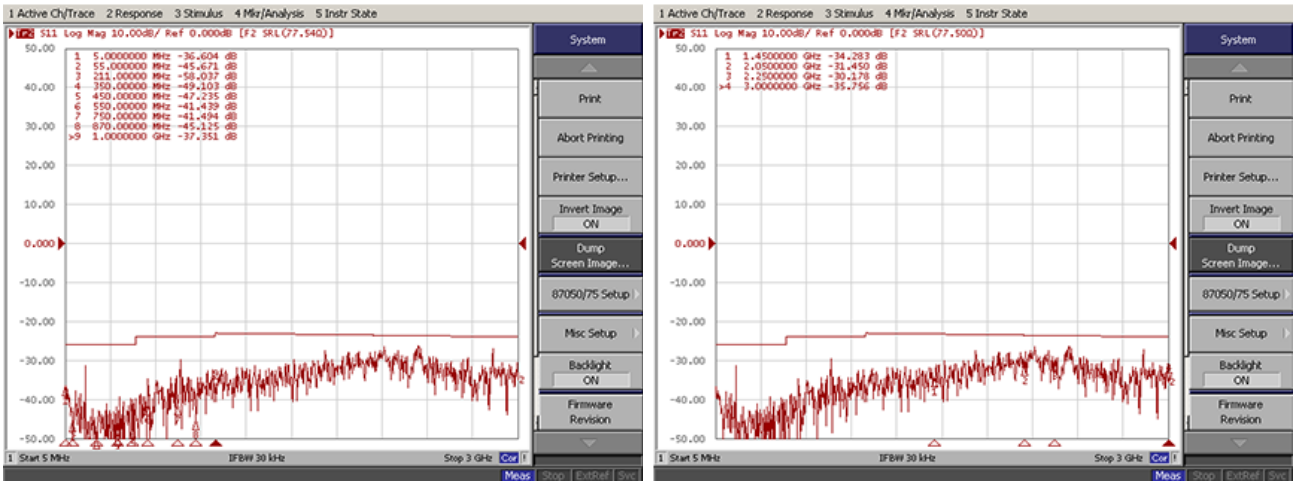
Measurement results of the most important technical parameters.



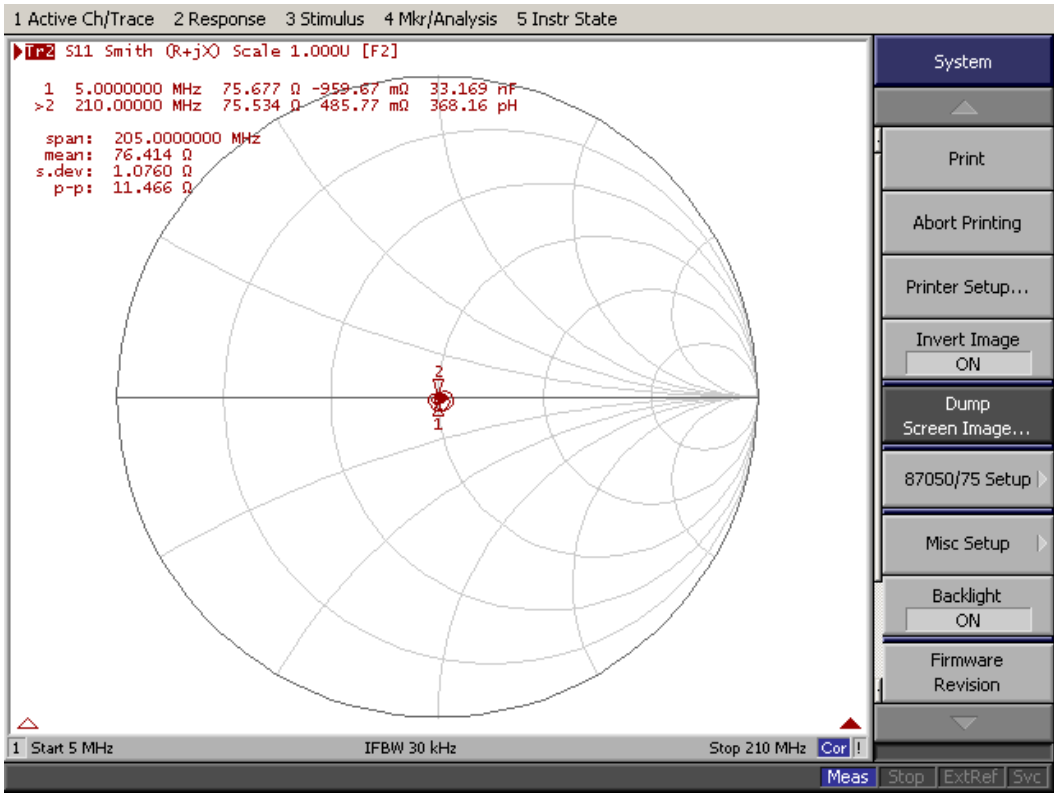
Coupling impedance in the frequency range 5-30 MHz
and shielding of the TRISET 302 B2ca cable in the frequency range 30-3000 MHz
In the frequency band up to 2 GHz, meets the requirement of class A++



Insertion loss in the 5-3000 MHz range

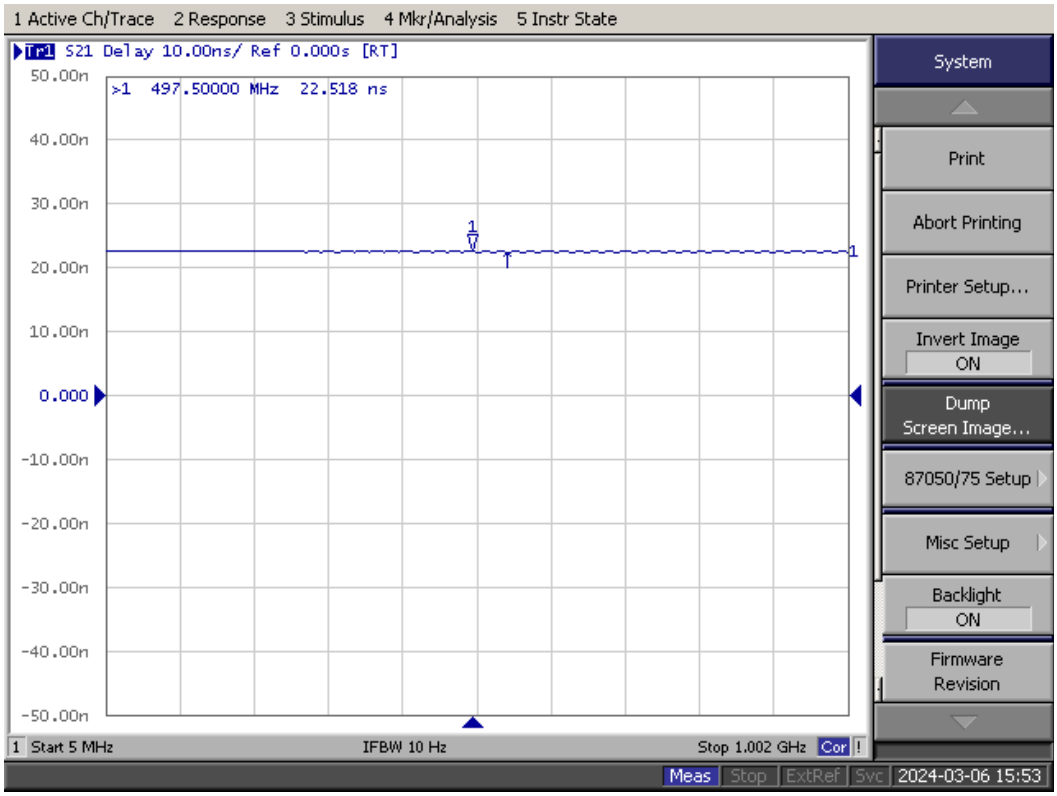


Cable reflection loss in the frequency range 5-3000 MHz.



Smith chart showing the wave impedance of the cable.

Measurements taken at both ends of a 100 m section of cable. Deviations from the nominal value of 75Ω not exceeding 1% guarantee perfect impedance matching in the entire transmission path.



The speed of signal propagation in a cable in the frequency range 5-1000 MHz.

Specifications

Product type		Coaxial cable
Type		TRISET 302 B2ca
Brand		TRISET
Cable length	m	500
Applications		Indoor
Cable class		RG-6
Compliance with relevant national legislation		Yes
CPR class		B2ca
Physical properties		
Impedance	Ohm	75
Screening efficiency class		A+
Transfer impedance TI	mΩ/m	< 2,5
Conductor	Material	Coper

	Diameter	mm	1.02
Dielectric	foaming		Physical
	Diameter	mm	4.6
shield			
No. of plies			3
First foil	bonded to dielectric		Yes
	Material		Al/PET/Al
Braid	Material		Aluminium
	wire diameter	mm	0.12
	no. of wires	pcs.	16 × 8
	winding angle	degree	26.69
	braid coverage	%	77
Second foil	Material		Al/PET
sheath	Material		LSZH
	Diameter	mm	7.0
	Color		White
Electrical parameters			
Resistance at 20°C		Ω/km	32.12 (shield) 21.91 (conductor)
capacity		pF/m	52.5
Mechanical properties			
Operating temperature		°C	-30...+70
Installation temperature		°C	-10...+40
Packaging			
Spool	Diameter	mm	370
	Width	mm	300
	Cable length	m	500