Application

RG-6, RG-11, and RG-59 are the most common types of coaxial cables used in a variety of applications, including cable television, internet connections, CCTV, and other communication systems. These cables are known for their efficiency in transmitting video, data, and radio frequency signals with minimal loss.
RG-6: Used in cable television (CATV), satellite TV, and broadband internet connections. Suitable for both residential and commercial installations.
RG-11: Ideal for long-distance cable runs, such as in CATV, CCTV installations, and large buildings. Suitable for both indoor and outdoor installations.
RG-59: Commonly used for CCTV, analog video signals, and short-distance RF connections. Suitable for residential security systems and short-run video transmission.

Performance

Voltage Rating: 30V
Temperature Rating: -20ºC to +75ºC

Construction

Conductor
RG-6: Copper or copper-clad steel.
RG-11: Thicker than RG-6, usually solid copper.
RG-59: Copper or copper-clad steel.
Insulation
RG-6: Polyethylene foam to maintain spacing and impedance.
RG-11: Thicker foam polyethylene for additional insulation.
RG-59: Solid or foam polyethylene.
Shield
RG6 / RG11 / RG59: Bonded Aluminum Foil
Braiding
RG6 / RG59: CCA (Copper Clad Aluminium)
Sheath
RG6 / RG11 / RG59: PVC/PE
Sheath Colour
Black

Specification

-ANSI/SCTE 74: Specification for Coaxial Cable.
-IEC 61196-1: International Electrotechnical Commission standard for Coaxial Communication Cables.

Advantages

RG-6:
High current-carrying capacity.
Low signal loss and minimal heat generation.
Effective shielding against EMI.
Suitable for high-frequency applications up to 3 GHz.
RG-11:
Lower signal attenuation compared to RG-6.
Suitable for long-distance signal transmission.
Excellent waterproof and anti-aging performance.
Operates at frequencies up to 3 GHz with minimal signal loss.
RG-59:
Flexible and easy to install.
Cost-effective for short-distance applications.
Provides adequate performance for lower-frequency applications.
Typically operates at frequencies up to 1 GHz.

Eastful Cable Lab

We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.
CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TUV Rhineland and CCS.

National Green Factory

Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China.
We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

Technical Parameters

Construction (Standard Shield)		Diameter (mm)		
Item	Material	RG59	RG6	RG11
Center Conductor	Copper Clad Steel/BC	0.81	1.02	1.63
Dielectric	Foam PE	3.66	4.57	7.11
1st Shield	Bonded Aluminum Foil	3.84	4.75	7.29
Jacket	PVC	6.10	6.91	10.16
No. of Strands		1	7	1
Nominal Diameter of Strands (mm)		7	10.20	1.24
Nominal Overall Diameter of Insulation (mm)		1	0.58	0.795
Nominal Overall Diameter (mm)		6.6	10.1	6.15
Nominal Weight (kg/km)		37	152	52
Electrical Charateristics				
Impedance(Ω)		75	75	75
Capacitance(pF/m)		54	54	72
Velocity of Propagation(%)		85	85	66
Shielding Effectiveness				
5-1000MHZ (dB)			≥80%	
Return Loss				
5-1000MHZ (dB)			≥22	
1000-2000MHZ (dB)			≥20	
Attenuation @68°F.(20 °C)				
@Frequency (Mhz)		Max Attenuation (dB/100m)		
		RG59	RG6	RG11
5		2.82	1.90	1.25
55		6.73	5.25	3.15
187		11.81	9.35	5.74
211		12.47	10.00	6.23
400		16.73	13.61	8.53
500		18.70	15.29	9.51
750		22.87	18.54	11.97
865		24.67	20.01	13.05
1000		26.64	21.49	14.27
1500		32.50	26.80	16.80
1800		35.60	28.90	18.60
2200		41.20	32.20	20.70
3000		45.20	37.60	24.90