

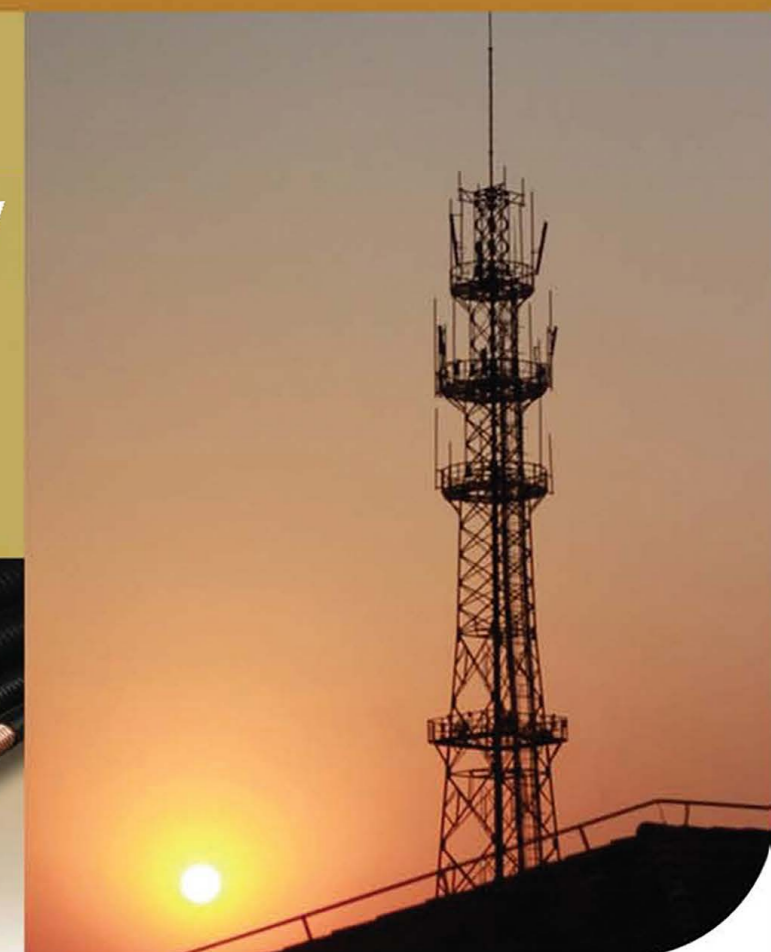
## ZTT GROUP

Established in 1992, ZTT started from optical fiber communications. ZTT was listed on Shanghai Stock Exchange (SSE) in 2002 (Stock Code in SSE: 600522), and issued the shares known as the "First Shares for Special Optical Fiber & Cable". Now ZTT has developed a diversified industries of telecom, power grid, marine system, renewable energy, new materials, etc.

Awarded for national innovative enterprise, Jiangsu province outstanding private enterprise, Top-500 Enterprise in China, China Quality Award, Gold-medal listed company, ZTT Group is now hosting 76 subsidiary companies and over 16,000 employees, with the deployment of Beijing Headquarters, Nantong New Headquarters, and Rudong Headquarters, as well as 54 offices and 10 marketing centers set up overseas, and 6 overseas plants operated in India, Brazil, Indonesia, Morocco, Turkey and Germany. ZTT has exported products to 160 countries and regions and has broken through the US\$10.82 billion marks in revenue in 2020.



## Radio Frequency Coaxial Cables



## Company Profile

*Your Partner in Cable*

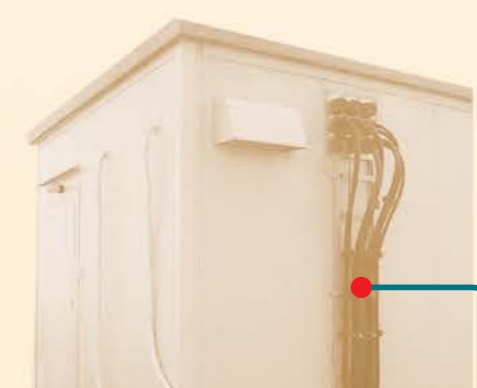
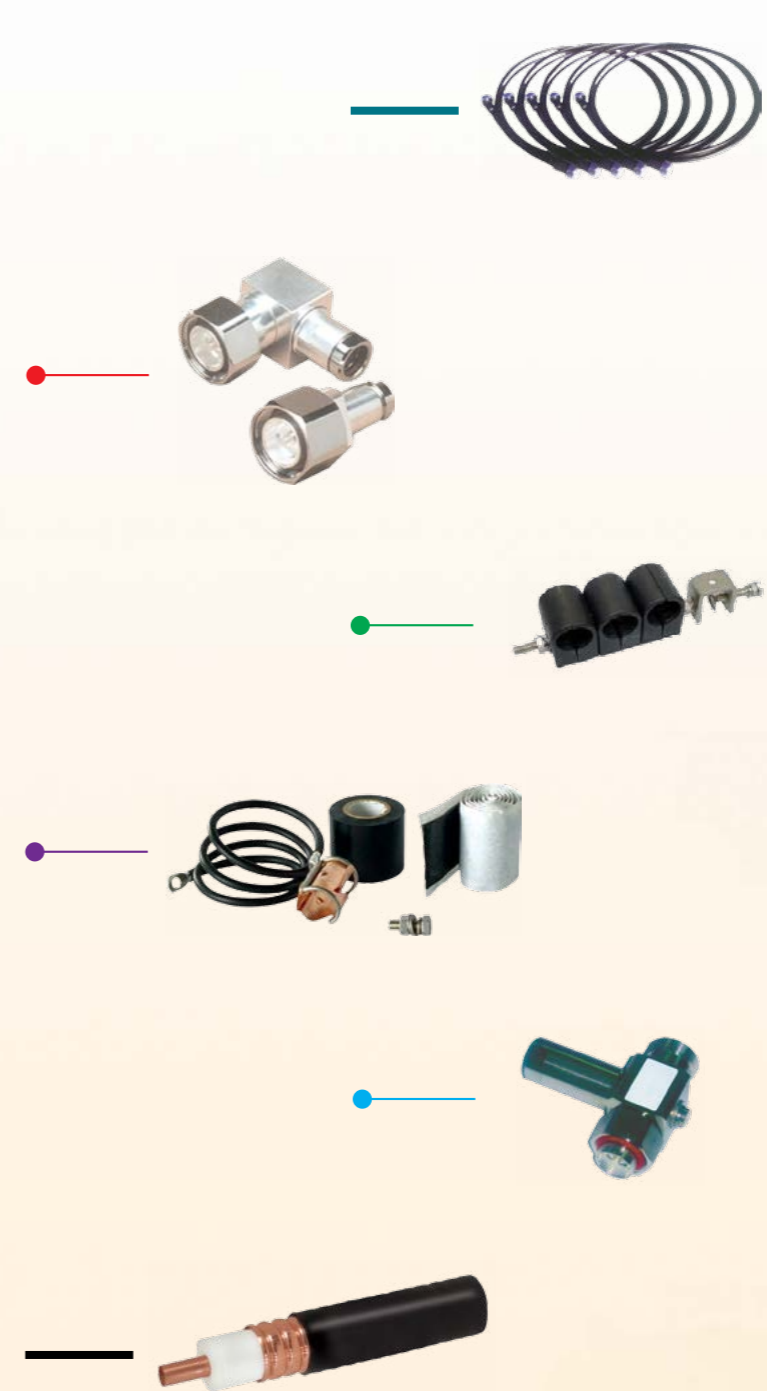
**ZTT was established in 1992, and now becomes a public high-tech enterprise with 76 subsidiaries, and about 16,000 employees (Code: 600522).**

**We provide products such as radio frequency cables, leaky coaxial cables, railway digital signal cables and accessories for mobile communications, which are widely used in over 20 countries. We have excellent R&D ability and with advanced equipments such as Maillefer and Rosendahl. We have capacity of manufacturing 80,000km radio frequency cables, 10,000km leaky coaxial cables, 13,000km railway digital signal cables and accessories per year.**

**Our products have passed the tests in many third laboratories, such as TLC&ROHS. We devote ourselves to offering safe and reliable products and quick and thoughtful service for our customers.**

# Type of Radio Frequency Cables for Communication Base Station

- RF Cable(Corrugated Copper tube)
  - HCAAY(Z)50-12(1/2")
  - HCTAY(Z)-50-22(7/8")
  - HCTAY(Z)-50-23(7/8" low loss)
  - HCTAY(Z)-50-32(1-1/4")
  - HHTAY(Z)-50-42(1-5/8")
- RF Cable(Corrugated Aluminum tube)
  - HCAALY(Z)-50-12(1/2"AL)
  - HCTALY(Z)-50-22(7/8"AL)
  - HCTALY(Z)-50-32(1-1/4"AL)
  - HCTALY(Z)-50-23(7/8"AL low loss)
- RF Cable (Super flexible Cable)
  - HRY(Z)-50-5(1/4"S)
  - HRCAY(Z)-50-9(1/2"S)
  - HHTAY(Z)-50-21(7/8"S)
- Accessories



## RF Cable (Corrugated Copper tube)

### HCAAY(Z)50-12(1/2")

#### Mechanical Properties

Diameter Over Dielectric(mm)	12.3
Diameter Over Jacket(mm)	15.7
Inner Conductor OD(mm)	4.8
Outer Conductor OD(mm)	13.9
Weight (kg/m)	0.24
Min bending radius single bending (mm)	80
Min bending radius repeated bending (mm)	125
Tensile strength(N)	1130
Operating temperature (deg Celcius)	-40°C ~+70°C

#### Electrical Properties

Charateristic impedance (Ω)	50±1	
Relative propagation velocity (%)	88	
Capacitance (PF/m)	76	
Minimum insulation resistance(DC 500V 1 minute)	3000MΩ·km	
Peak power rating (kW)	40	
VSWR(±3%)	800~1000	1.07
	1700~2300	1.07

#### Attenuation values and power rating

Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)	Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)
100	2.22	2.60	2000	11.22	0.53
150	2.74	2.10	2100	11.54	0.51
200	3.20	1.81	2200	11.84	0.50
300	3.96	1.46	2400	12.43	0.46
450	4.92	1.18	2500	12.73	0.45
500	5.22	1.12	2700	13.31	0.44
700	6.26	0.96	3000	14.14	0.42
800	6.73	0.87			
900	7.19	0.82			
1000	7.62	0.77			
1500	9.55	0.62			
1800	10.57	0.56			

Note: Maximum value shall be 105% of the nominal value.

## RF Cable (Corrugated Copper tube)

### HCTAY(Z)-50-22(7/8")

#### Mechanical Properties

Diameter Over Dielectric(mm)	22.2
Diameter Over Jacket(mm)	27.4
Inner Conductor OD(mm)	9
Outer Conductor OD(mm)	24.9
Weight (kg/m)	0.52
Min bending radius single bending (mm)	140
Min bending radius repeated bending (mm)	250
Tensile strength(N)	1500
Operating temperature (deg Celcius)	-40°C ~+70°C

#### Electrical Properties

Charateristic impedance (Ω)	50±1	
Relative propagation velocity (%)	88	
Capacitance (PF/m)	76	
Minimum insulation resistance(DC 500V 1 minute)	3000MΩ·km	
Peak power rating (kW)	90	
VSWR(±3%)	800~1000	1.06
	1700~2300	1.06

#### Attenuation values and power rating

Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)	Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)
100	1.19	8.60	2000	6.07	1.68
150	1.47	7.00	2100	6.24	1.63
200	1.72	6.00	2200	6.41	1.59
300	2.13	4.83	2400	6.72	1.50
450	2.65	3.88	2500	6.90	1.47
500	2.80	3.67	2700	7.22	1.41
700	3.36	3.02	3000	7.68	1.33
800	3.62	2.83			
900	3.86	2.65			
1000	4.10	2.50			
1500	5.16	1.99			
1800	5.71	1.79			

Note: Maximum value shall be 105% of the nominal value.

## RF Cable (Corrugated Copper tube)

### HCTAY(Z)-50-23(7/8" low loss)

#### Mechanical Properties

Diameter Over Dielectric(mm)	22.8
Diameter Over Jacket(mm)	27.9
Inner Conductor OD(mm)	9.4
Outer Conductor OD(mm)	25.2
Weight (kg/m)	0.55
Min bending radius single bending (mm)	160
Min bending radius repeated bending (mm)	285
Tensile strength(N)	850
Operating temperature (deg Celcius)	-40°C ~+70°C

#### Electrical Properties

Charateristic impedance (Ω)	50±1	
Relative propagation velocity (%)	88	
Capacitance (PF/m)	76	
Minimum insulation resistance(DC 500V 1 minute)	3000MΩ·km	
Peak power rating (kW)	91	
VSWR(±3%)	800~1000	1.07
	1700~2300	1.07

#### Attenuation values and power rating

Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)	Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)
100	1.14	9.10	2000	5.85	1.86
150	1.41	7.35	2100	6.02	1.79
200	1.64	6.34	2200	6.19	1.75
300	2.04	5.11	2400	6.51	1.61
450	2.53	4.13	2500	6.67	1.58
500	2.68	3.92	2700	6.98	1.54
700	3.23	3.36	3000	7.43	1.47
800	3.48	3.05			
900	3.71	2.87			
1000	3.94	2.70			
1500	4.96	2.17			
1800	5.51	1.96			

Note: Maximum value shall be 105% of the nominal value.

## RF Cable (Corrugated Copper tube)

### HCTAY(Z)-50-32(1-1/4")

#### Mechanical Properties

Diameter Over Dielectric(mm)	32.7
Diameter Over Jacket(mm)	38.4
Inner Conductor OD(mm)	13.1
Outer Conductor OD(mm)	35.8
Weight (kg/m)	0.99
Min bending radius single bending (mm)	200
Min bending radius repeated bending (mm)	380
Tensile strength(N)	2500
Operating temperature (deg Celcius)	-40°C ~+70°C

#### Electrical Properties

Charateristic impedance (Ω)	50±1	
Relative propagation velocity (%)	88	
Capacitance (PF/m)	76	
Minimum insulation resistance(DC 500V 1 minute)	3000MΩ·km	
Peak power rating (kW)	200	
VSWR(±3%)	800~1000	1.09
	1700~2300	1.09

#### Attenuation values and power rating

Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)	Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)
100	0.81	13.00	2000	4.38	2.65
150	1.01	10.50	2100	4.50	2.55
200	1.18	9.05	2200	4.64	2.50
300	1.48	7.30	2400	4.91	2.30
450	1.84	5.90	2500	5.02	2.25
500	1.95	5.60	2700	5.27	2.20
700	2.36	4.80	3000	5.62	2.10
800	2.41	4.35			
900	2.72	4.10			
1000	2.90	3.85			
1500	3.68	3.10			
1800	4.11	2.80			

Note: Maximum value shall be 105% of the nominal value.

## RF Cable (Corrugated Copper tube)

### HHTAY(Z)-50-42(1-5/8")

#### Mechanical Properties

Diameter Over Dielectric(mm)	42.3
Diameter Over Jacket(mm)	49.5
Inner Conductor OD(mm)	17.3
Outer Conductor OD(mm)	46.5
Weight (kg/m)	1.4
Min bending radius single bending (mm)	280
Min bending radius repeated bending (mm)	500
Tensile strength(N)	3000
Operating temperature (deg Celcius)	-40°C ~+70°C

#### Electrical Properties

Charateristic impedance (Ω)	50±1	
Relative propagation velocity (%)	88	
Capacitance (PF/m)	76	
Minimum insulation resistance(DC 500V 1 minute)	3000MΩ·km	
Peak power rating (kW)	302	
VSWR(±3%)	800~1000	1.10
	1700~2300	1.10

#### Attenuation values and power rating

Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)	Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)
100	0.64	16.90	2000	3.55	3.45
150	0.80	13.65	2100	3.66	3.32
200	0.94	11.77	2200	3.77	3.25
300	1.18	9.49	2400	4.02	2.99
450	1.48	7.67	2500	4.08	2.93
500	1.57	7.28	2700	4.28	2.86
700	1.90	6.24	3000	5.08	2.73
800	2.06	5.66			
900	2.20	5.33			
1000	2.34	5.01			
1500	2.98	4.03			
1800	3.31	3.64			

Note: Maximum value shall be 105% of the nominal value.

## RF Cable (Corrugated Aluminum tube)

### HCAALY(Z)-50-12(1/2"AL)

#### Mechanical Properties

Diameter Over Dielectric(mm)	12.2
Diameter Over Jacket(mm)	15.7
Inner Conductor OD(mm)	4.8
Outer Conductor OD(mm)	14.0
Weight (kg/m)	0.16
Min bending radius single bending (mm)	90
Min bending radius repeated bending (mm)	145
Tensile strength(N)	1000
Operating temperature (deg Celcius)	-40°C ~+70°C

#### Electrical Properties

Charateristic impedance (Ω)	50±1	
Relative propagation velocity (%)	82	
Capacitance (PF/m)	76	
Minimum insulation resistance(DC 500V 1 minute)	3000MΩ·km	
Peak power rating (kW)	40	
VSWR(±3%)	800~1000	1.10
	1700~2300	1.10

#### Attenuation values and power rating

Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)	Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)
100	2.47	3.94	2000	11.73	0.80
150	3.04	3.10	2100	11.97	0.78
200	3.52	2.81	2200	12.34	0.77
300	4.37	2.23	2400	13.10	0.73
450	5.23	1.80	2500	13.24	0.71
500	5.61	1.71	2700	13.69	0.68
700	6.75	1.45	3000	14.27	0.64
800	7.17	1.33			
900	7.67	1.25			
1000	8.13	1.18			
1500	9.92	0.95			
1800	11.08	0.86			

Note: Maximum value shall be 105% of the nominal value.

## RF Cable (Corrugated Aluminum tube)

### HCTALY(Z)-50-22(7/8"AL)

#### Mechanical Properties

Diameter Over Dielectric(mm)	22.2
Diameter Over Jacket(mm)	25
Inner Conductor OD(mm)	9
Outer Conductor OD(mm)	25
Weight (kg/m)	0.37
Min bending radius single bending (mm)	150
Min bending radius repeated bending (mm)	260
Tensile strength(N)	850
Operating temperature (deg Celcius)	-40°C ~+70°C

#### Electrical Properties

Charateristic impedance (Ω)	50±1	
Relative propagation velocity (%)	82	
Capacitance (PF/m)	76	
Minimum insulation resistance(DC 500V 1 minute)	3000MΩ·km	
Peak power rating (kW)	40	
VSWR(±3%)	800~1000	1.10
	1700~2300	1.10

#### Attenuation values and power rating

Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)	Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)
100	1.25	8.60	2000	6.60	1.68
150	1.56	7.10	2100	6.79	1.63
200	1.81	6.00	2200	6.98	1.59
300	2.25	4.83	2400	7.36	1.50
450	2.82	3.88	2500	7.54	1.47
500	2.98	3.67	2700	7.90	1.41
700	3.60	3.02	3000	8.43	1.33
800	3.89	2.83			
900	4.16	2.65			
1000	4.42	2.50			
1500	5.58	1.99			
1800	6.19	1.79			

Note: Maximum value shall be 105% of the nominal value.

## RF Cable (Corrugated Aluminum tube)

### HCTALY(Z)-50-32(1-1/4"AL)

#### Mechanical Properties

Diameter Over Dielectric(mm)	32.3
Diameter Over Jacket(mm)	38.6
Inner Conductor OD(mm)	13.1
Outer Conductor OD(mm)	35.8
Weight (kg/m)	0.65
Min bending radius single bending (mm)	250
Min bending radius repeated bending (mm)	300
Tensile strength(N)	2000
Operating temperature (deg Celcius)	-40°C ~+70°C

#### Electrical Properties

Charateristic impedance (Ω)	50±1	
Relative propagation velocity (%)	88	
Capacitance (PF/m)	76	
Minimum insulation resistance(DC 500V 1 minute)	3000MΩ·km	
Peak power rating (kW)	200	
VSWR(±3%)	800~1000	1.11
	1700~2300	1.11

#### Attenuation values and power rating

Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)	Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)
100	0.91	11.70	2000	5.19	2.39
150	1.13	9.45	2100	5.35	2.30
200	1.32	8.15	2200	5.52	2.25
300	1.66	6.57	2400	5.84	2.07
450	2.1	5.31	2500	5.99	2.03
500	2.23	5.04	2700	6.3	1.98
700	2.71	4.32	3000	6.76	1.89
800	2.94	3.92			
900	3.16	3.69			
1000	3.36	3.47			
1500	4.32	2.79			
1800	4.85	2.52			

Note: Maximum value shall be 105% of the nominal value.

## RF Cable (Corrugated Aluminum tube)

### HCTALY(Z)-50-23(7/8"AL low loss)

#### Mechanical Properties

Diameter Over Dielectric(mm)	22.8
Diameter Over Jacket(mm)	27.9
Inner Conductor OD(mm)	9.4
Outer Conductor OD(mm)	25.2
Weight (kg/m)	0.55
Min bending radius single bending (mm)	160
Min bending radius repeated bending (mm)	285
Tensile strength(N)	850
Operating temperature (deg Celcius)	-40°C ~+70°C

#### Electrical Properties

Charateristic impedance (Ω)	50±1	
Relative propagation velocity (%)	88	
Capacitance (PF/m)	76	
Minimum insulation resistance(DC 500V 1 minute)	3000MΩ·km	
Peak power rating (kW)	91	
VSWR(±3%)	800~1000	1.07
	1700~2300	1.07

#### Attenuation values and power rating

Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)	Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)
100	1.24	9.10	2000	6.34	1.86
150	1.54	7.35	2100	6.52	1.79
200	1.79	6.34	2200	6.70	1.75
300	2.23	5.11	2400	7.02	1.61
450	2.77	4.13	2500	7.21	1.58
500	2.93	3.92	2700	7.54	1.54
700	3.51	3.36	3000	8.02	1.47
800	3.78	3.05			
900	4.03	2.87			
1000	4.28	2.70			
1500	5.38	2.17			
1800	5.97	1.96			

Note: Maximum value shall be 105% of the nominal value.

## RF Cable (Super flexible Cable)

### HRY(Z)-50-5(1/4"S)

#### Mechanical Properties

Diameter Over Dielectric(mm)	4.85
Diameter Over Jacket(mm)	7.5
Inner Conductor OD(mm)	1.9
Outer Conductor OD(mm)	6.4
Weight (kg/m)	0.095
Min bending radius single bending (mm)	12
Min bending radius repeated bending (mm)	25
Tensile strength(N)	680
Operating temperature (deg Celcius)	-40°C ~+70°C

#### Electrical Properties

Charateristic impedance (Ω)	50±1	
Relative propagation velocity (%)	88	
Capacitance (PF/m)	76	
Minimum insulation resistance(DC 500V 1 minute)	3000MΩ·km	
Peak power rating (kW)	6.4	
VSWR(±3%)	800~1000	1.12
	1700~2300	1.12

#### Attenuation values and power rating

Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)	Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)
100	5.86	0.858	2000	29.37	0.175
150	7.23	0.693	2100	30.19	0.168
200	8.41	0.597	2200	31.01	0.165
300	10.42	0.482	2400	32.61	0.152
450	12.93	0.389	2500	33.36	0.149
500	13.68	0.370	2700	34.87	0.145
700	16.39	0.317	3000	37.07	0.139
800	17.64	0.287			
900	18.82	0.271			
1000	19.93	0.254			
1500	24.97	0.205			
1800	27.67	0.185			

Note: Maximum value shall be 105% of the nominal value.



## RF Cable (Super flexible Cable)

### HRCAY(Z)-50-9(1/2" S)

#### Mechanical Properties

Diameter Over Dielectric(mm)	9
Diameter Over Jacket(mm)	13.3
Inner Conductor OD(mm)	3.6
Outer Conductor OD(mm)	12.1
Weight (kg/m)	0.2
Min bending radius single bending (mm)	17
Min bending radius repeated bending (mm)	55
Tensile strength(N)	800
Operating temperature (deg Celcius)	-40°C ~+70°C

#### Electrical Properties

Charateristic impedance (Ω)	50±1	
Relative propagation velocity (%)	82	
Capacitance (PF/m)	81	
Minimum insulation resistance(DC 500V 1 minute)	3000MΩ·km	
Peak power rating (kW)	20	
VSWR(±3%)	800~1000	1.15
	1700~2300	1.15

#### Attenuation values and power rating

Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)	Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)
100	3.07	2.60	2000	16.35	0.53
150	3.83	2.10	2100	16.83	0.51
200	4.48	1.81	2200	17.30	0.50
300	5.61	1.46	2400	18.59	0.46
450	7.02	1.18	2500	18.65	0.45
500	7.44	1.12	2700	19.52	0.44
700	8.93	0.96	3000	20.79	0.42
800	9.68	0.87			
900	10.35	0.82			
1000	10.98	0.77			
1500	13.84	0.62			
1800	15.38	0.56			

Note: Maximum value shall be 105% of the nominal value.

## RF Cable (Super flexible Cable)

### HHTAY(Z)-50-21(7/8" S)

#### Mechanical Properties

Diameter Over Dielectric(mm)	22.8
Diameter Over Jacket(mm)	27.5
Inner Conductor OD(mm)	9.4
Outer Conductor OD(mm)	24.9
Weight (kg/m)	0.55
Min bending radius single bending (mm)	90
Min bending radius repeated bending (mm)	130
Tensile strength(N)	1500
Operating temperature (deg Celcius)	-40°C ~+70°C

#### Electrical Properties

Charateristic impedance (Ω)	50±1	
Relative propagation velocity (%)	88	
Capacitance (PF/m)	76	
Minimum insulation resistance(DC 500V 1 minute)	3000MΩ·km	
Peak power rating (kW)	91	
VSWR(±3%)	800~1000	1.09
	1700~2300	1.09

#### Attenuation values and power rating

Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)	Frequency (MHz)	Attenuation (db/100m)	Power rating (kW)
100	1.33	6.50	2000	6.68	1.33
150	1.64	5.25	2100	6.88	1.28
200	1.91	4.53	2200	7.07	1.25
300	2.36	3.65	2400	7.44	1.15
450	2.94	2.95	2500	7.60	1.13
500	3.11	2.80	2700	7.95	1.10
700	3.73	2.40	3000	8.45	1.05
800	4.01	2.18			
900	4.27	2.05			
1000	4.53	1.93			
1500	5.69	1.55			
1800	6.30	1.40			

Note: Maximum value shall be 105% of the nominal value.

# Jumpers

- ZTT jumpers have the following advantages:  
Low VSWR excellent flexibility, Easy Attachment and Water-proof.

## Characteristic Chart

Cable size		1/2"S	1/4"S	1/2"
Item	Characteristic impedance( $\Omega$ )	50	50	50
	Insulated resistance(M $\Omega$ )	$\geq 5000$	$\geq 5000$	$\geq 5000$
	Dielectric strength(V)	2500	2000	2500
	Frequency range(GHz)	0~3	0~3	0~3
VSWR( $\pm 3\%$ )	0~3000MHz	$\leq 1.1$	$\leq 1.1$	$\leq 1.1$
	800~1000MHz	$\leq 1.06$	$\leq 1.06$	$\leq 1.06$
	1700~2500MHz	$\leq 1.08$	$\leq 1.08$	$\leq 1.08$
	Work voltage(V)	1500	1500	1500

- Connectors provided by ZTT have the following advantages:  
Low VSWR, Low Intermodulation, Easy Attachment and Water-proof.

## Characteristic Chart

Cable size		1/2"S	1/4"S	1/2"
Item	Characteristic impedance( $\Omega$ )	50	50	50
	Frequency range	1M~11GHz	0~18GHz	0~3GHz
	Dielectric strength(Min at sea level)(V)	2500	500	1500
	VSWR( $\pm 3\%$ )	$\leq 1.06(1M-3G)$ $\leq 1.08(3G-11G)$	$\leq 1.2(0-3G)$ $\leq 1.4(3-18G)$	$\leq 1.15(0-3G)$
Contact resistance	Inner conductor(m $\Omega$ )	$\leq 0.8$	$\leq 5$	$\leq 5$
	Outer conductor(m $\Omega$ )	$\leq 0.4$	$\leq 2.5$	$\leq 2.5$
	Insulated resistance(m $\Omega$ )	$\geq 5000$	$\geq 5000$	$\geq 5000$
	Insertion loss(dB)	$\leq 0.1$	$\leq 0.1$	$\leq 0.1$
	Center retentivity(N)	$> 0.6$	$> 0.28$	$> 0.57$
	Durability(cycles)	$\geq 500$	$\geq 500$	$\geq 500$

# Cable clamps

- Feeder clamps are made of stainless steel and Anti-UV rubber, adopting special technic of coating, widely used in the fix of RF cables. Applied in different operation temperature.

### Through type



Item	Type	$\phi$ D(mm)
1/2"	1*1/2"	16
1/2"	2*1/2"	16
1/2"	3*1/2"	16
7/8"	1*7/8"	27.5
7/8"	2*7/8"	27.5
7/8"	3*7/8"	27.5
7/8"	4*7/8"	27.5

### Wall attachment type



Item	Type	$\phi$ D(mm)
1/2"	1*1/2"	16
1/2"	2*1/2"	16
7/8"	1*7/8"	27.5
7/8"	2*7/8"	27.5
7/8"	3*7/8"	27.5

### Anchor ear type



Item	Type	$\phi$ D(mm)
1/2"	1*1/2"	16
7/8"	1*7/8"	27.5

### Throat hoop type



Item	Type	$\phi$ D(mm)
1/2"	1*1/2"	16
7/8"	1*7/8"	27.5
7/8"	6*7/8"	27.5

### Shackle type



Item	Type	$\phi$ D(mm)
7/8"	1*7/8"	27.5
7/8"	2*7/8"	27.5
7/8"	3*7/8"	27.5



# Connectors



# Grounding kits

■ Various indoor & outdoor grounding kits are applied to the grounding protecting of various feeders, installation easily and performance reliable.

● Spring type outdoor grounding kits



Item	Description
1/2"series	1/2"ground kits used outdoor
7/8"series	7/8"ground kits used outdoor
1-1/4"series	1-1/4"ground kits used outdoor
1-5/8"series	1-5/8"ground kits used outdoor

● Framework type outdoor grounding kits



Item	Description
1/2"series	1/2"ground kits used outdoor
7/8"series	7/8"ground kits used outdoor
1-1/4"series	1-1/4"ground kits used outdoor
1-5/8"series	1-5/8"ground kits used outdoor

● Indoor grounding kits



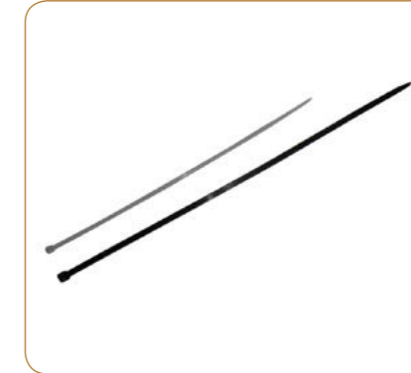
Item	Description
Common type	Indoor ground kits
Common type	Indoor ground kits(with C copper nose)

# Other Accessories

● Grounding bracket



● Tie wraps



● Daub & Adhesive tape



● Arrester



● Wall entry system



● Load



● Cold shrink weather proofing kits



● Hoisting grips



● Feeder markings



## ISO Certificates



## Excellent Test Facilities



ZTT establishes quality control system strictly according to ISO9001, ISO14001 and OHSAS18001 international standards and takes the quality control department as the core, in order to create ZTT brand and make efforts to contribute the mobile communications.

All the test instruments for manufacturing are advanced equipment which adopted from home and abroad, and they are including network analyzer, Digital LCR meter, Digital multimeter, High resistance meter, Milliohm meter, Dielectricity tester, Project profile analyzer, Spectrum Analyzer and Signal generator, Anechoic chamber.