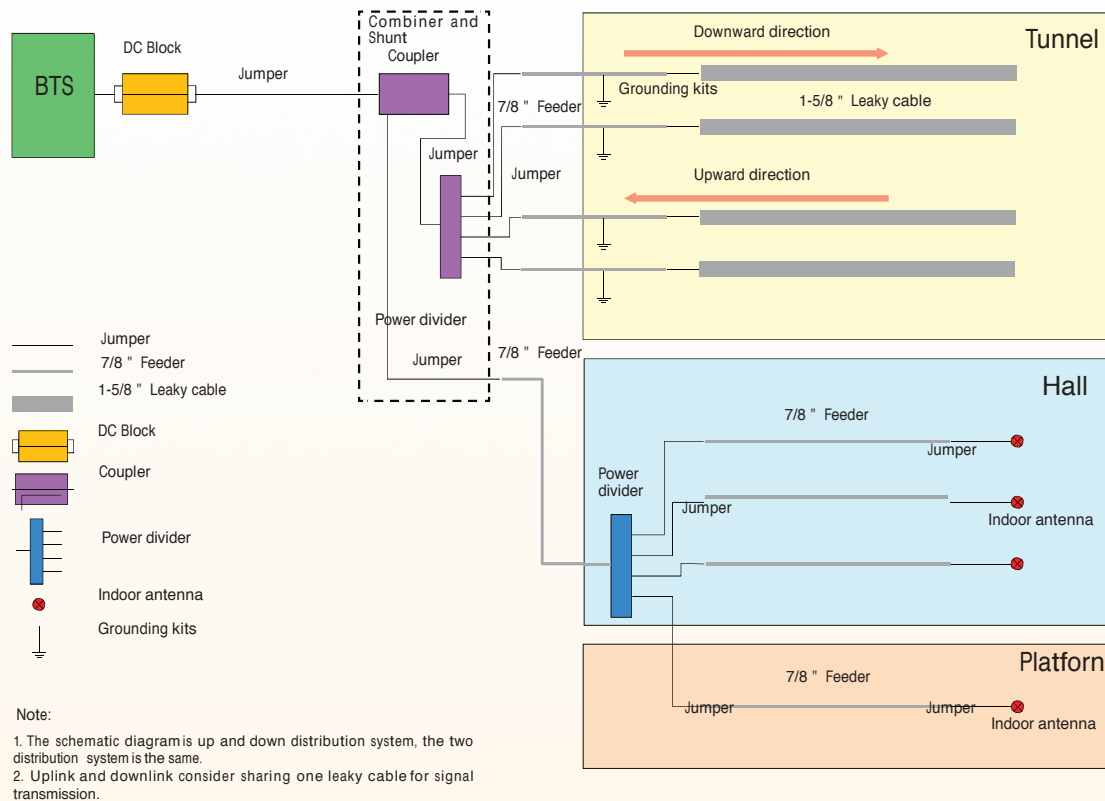
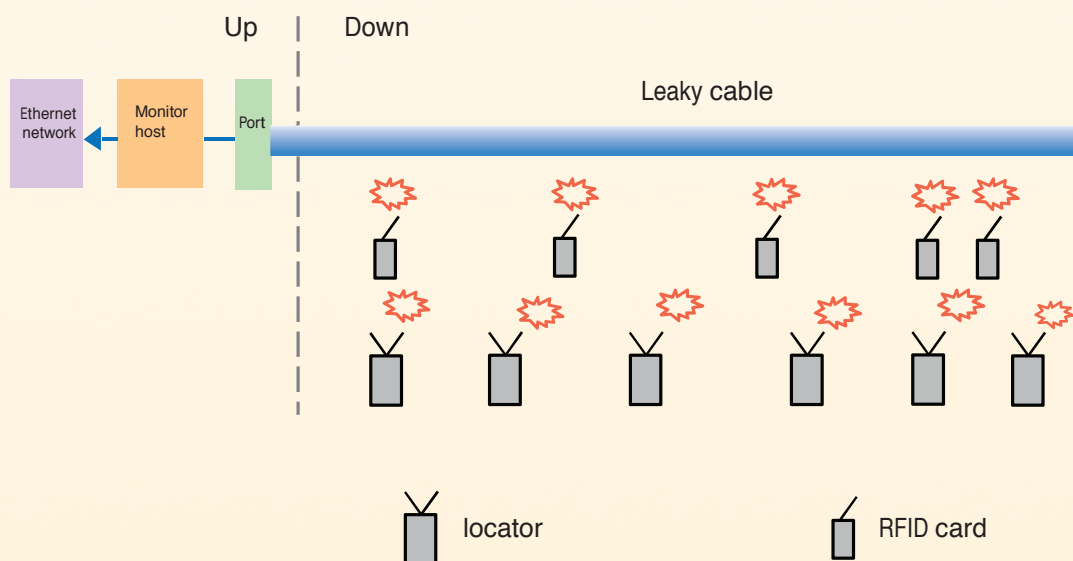


Leaky cable application system

Wireless communication system in subway



Wireless communication system in mine



Type of Leaky Coaxial Cables for Communication Base Station

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- HLRCTSHYZ-50-22 (7/8")
- HLRCTSMYZ-50-22 (7/8")
- HLRCTSLYZ-50-32 (1-1/4")
- HLRCTCMYZ-50-32 (1-1/4")
- HLRCTSHYZ-50-32 (1-1/4")
- HLRHTSMYZ-50-42 (1-5/8")
- HLRHTCHYZ-50-42 (1-5/8")
- HLCTAYZ-50-22-C1 (7/8") HLCTAYZ-
50-22-C2 (7/8") HLCTAYZ-50-32-C1
(1-1/4")
HLCTAYZ-50-32-C2 (1-1/4")



HLRCTSMYZ-50-22 (7/8")

• The product characterized long electromagnetic radiation distance and is suitable for the coverage of enclosed areas, such as rail tunnels, high speed railway tunnels, underground parking and so on. It has strong radiation performance and uniform fluctuation in narrow band.

• Best working frequency range: 150~500 & 600~1000MHz

Performances

• Structure

Cable type	Radiating
Size	7/8"
Inner conductor material / OD	Copper tube / 9.0 mm
Insulating material	Physical foamed polyethylene dielectric
Outer conductor material / OD	Overlapping copper foil / 23.0 mm
Jacket material	LSOH polyolefin
Diameter over Jacket / color	27.0 mm / black
Weight	490 kg/km

• Mechanical characteristics

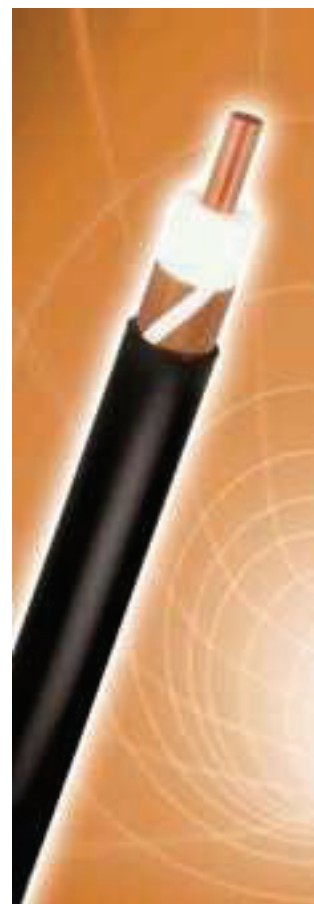
Tensile force	>2000 N
Minimum bending radius, single bend	350 mm
Indication of slot alignment	Guides opposite to slots
Minimum distance to wall	100 mm
Recommended clamp spacing	0.9 m
Installation temperature	-25~+60 °C
Operation temperature	-40~+85 °C
Storage temperature	-70~+85 °C

• Electrical characteristics

Cut-off frequency	530~590 MHz & Its multitles
Polarization	Vertical
VSWR	1.3
Impedance	50±2 Ω
Encircle DC resistance	4.5 Ω/km
Insulation dielectric strength	15000 V (DC, 1min)
Minimum insulation resistance	5000 MΩ·km
Jacket spark test voltage	8000 V (AC)
Peak power	91 kW
Velocity	89 %

Frequency (MHz)	Attenuation (dB/100m, 20 °C)	Coupling Loss (50% / 95%, 2m, dB)
150	1.56	62/74
350	2.76	59/68
450	3.10	62/70
800	4.40	62/71
900	4.94	61/71

Range: Coupling Loss: ±5 dB, Attenuation: ±10 %



Notes:

Coupling Loss & Attenuation is tested by the free-space method according to IEC 61196-4 Standards.

HLRCTSHYZ-50-22 (7/8")

• The product characterized long electromagnetic radiation distance and is suitable for the coverage of enclosed areas, such as rail tunnels, high speed railway tunnels, underground parking and so on. It has strong radiation performance and uniform fluctuation in narrow band.

• Best working frequency range: 800~1000 & 1700~2400MHz

Performances



• Structure

Cable type	Radiating
Size	7/8"
Inner conductor material / OD	Copper tube / 9.0 mm
Insulating material	Physical foamed polyethylene dielectric
Outer conductor material / OD	Overlapping copper foil / 23.0 mm
Jacket material	LSOH polyolefin
Diameter over Jacket / color	27.0 mm / black
Weight	490 kg/km

• Mechanical characteristics

Tensile force	>2000 N
Minimum bending radius, single bend	350 mm
Indication of slot alignment	Guides opposite to slots
Minimum distance to wall	100 mm
Recommended clamp spacing	0.9 m
Installation temperature	-25~+60 °C
Operation temperature	-40~+85 °C
Storage temperature	-70~+85 °C

• Electrical characteristics

Cut-off frequency	1.3~1.4GHz & Its multitles
Polarization	Vertical
VSWR	1.3
Impedance	50±2 Ω
Encircle DC resistance	4.5 Ω/km
Insulation dielectric strength	15000 V (DC, 1min)
Minimum insulation resistance	5000 MΩ·km
Jacket spark test voltage	8000 V (AC)
Peak power	91 kW
Velocity	89 %

Frequency (MHz)	Attenuation (dB/100m, 20 °C)	Coupling Loss (50% / 95%, 2m, dB)
150	1.58	70/82
450	2.97	73/81
800	4.19	69/75
900	4.54	69/77
1800	8.69	65/72
2200	11.30	66/72
2400	13.10	64/70

Range: Coupling Loss: ±5 dB, Attenuation: ±10 %

Notes:

Coupling Loss & Attenuation is tested by the free-space method according to IEC 61196-4 Standards.

MYZ-50-32 (1-1/4")

- The product characterized long electromagnetic radiation distance and is suitable for the coverage of enclosed areas, such as rail tunnels, high speed railway tunnels, underground parking and so on. It has strong radiation performance and uniform fluctuation in narrow band.
- Best working frequency range: 300~600 & 670~950MHz

Performances

• Structure

Cable type	Radiating
Size	1-1/4"
Inner conductor material / OD	Copper tube / 13.1 mm
Insulating material	Physical foamed polyethylene dielectric
Outer conductor material / OD	Overlapping corrugated copper foil / 33.6 mm
Jacket material	LSOH polyolefin
Diameter over Jacket / color	38.0 mm / black
Weight	800 kg/km

• Mechanical characteristics

Tensile force	>2300 N
Minimum bending radius, single bend	500 mm
Indication of slot alignment	Guides opposite to slots
Minimum distance to wall	100 mm
Recommended clamp spacing	1~1.2 m
Installation temperature	-25~+60℃
Operation temperature	-40~+85℃
Storage temperature	-70~+85℃

• Electrical characteristics

Cut-off frequency	610~650 MHz
Polarization	Vertical
VSWR	1.3
Impedance	50±2 Ω
Encircle DC resistance	3 Ω/km
Insulation dielectric strength	15000 V (DC, 1min)
Minimum insulation resistance	5000 MΩ·km
Jacket spark test voltage	8000 V (AC)
Peak power	200 kW
Velocity	88 %

Frequency (MHz)	Attenuation (dB/100m, 20℃)	Coupling Loss (50% / 95%, 2m, dB)
350	1.70	75/83
450	2.00	73/79
800	2.90	66/68
900	3.10	64/68

Range: Coupling Loss: ±5 dB, Attenuation: ±10 %



Notes:

Coupling Loss & Attenuation is tested by the free-space method according to IEC 61196-4 Standards.

HLRCTSLYZ-50-32 (1-1/4")

● The product characterized long electromagnetic radiation distance and is suitable for the coverage of enclosed areas, such as rail tunnels, high speed railway tunnels, underground parking and so on. It has strong radiation performance and uniform fluctuation in narrow band.

• Best working frequency range: 300~500MHz

Performances

● Structure

Cable type	Radiating
Size	1-1/4"
Inner conductor material / OD	Copper tube / 13.1 mm
Insulating material	Physical foamed polyethylene dielectric
Outer conductor material / OD	Overlapping copper foil / 33.6 mm
Jacket material	LSOH polyolefin
Diameter over Jacket / color	38.0 mm / black
Weight	800 kg/km

● Mechanical characteristics

Tensile force	>2300 N
Minimum bending radius, single bend	500 mm
Indication of slot alignment	Guides opposite to slots
Minimum distance to wall	100 mm
Recommended clamp spacing	1~1.2 m
Installation temperature	-25~+60℃
Operation temperature	-40~+85℃
Storage temperature	-70~+85℃

● Electrical characteristics

Cut-off frequency	Non stop bands in working frequency
Polarization	Vertical
VSWR	1.3
Impedance	50±2 Ω
Encircle DC resistance	3 Ω/km
Insulation dielectric strength	15000 V (DC, 1min)
Minimum insulation resistance	5000 MΩ·km
Jacket spark test voltage	8000 V (AC)
Peak power	200 kW
Velocity	88 %

Frequency (MHz)	Attenuation (dB/100m, 20℃)	Coupling Loss (50% / 95%, 2m, dB)
350	1.93	66/76
450	2.21	67/77

Range: Coupling Loss: ±5 dB, Attenuation: ±10 %



Notes:

Coupling Loss & Attenuation is tested by the free-space method according to IEC 61196-4 Standards.

HYZ-50-42 (1-5/8")

• The product characterized long electromagnetic radiation distance and is suitable for the coverage of enclosed areas, such as rail tunnels, high speed railway tunnels, underground parking and so on. It has strong radiation performance and uniform fluctuation in narrow band.

• Best working frequency range: 800~1000 & 1700~2700MHz

• Structure

Cable type	Radiating
Size	1-5/8"
Inner conductor material / OD	Helical copper tube / 17.3 mm
Insulating material	Physical foamed polyethylene dielectric
Outer conductor material / OD	Overlapping corrugated copper foil / 43.5 mm
Jacket material	LSOH polyolefin
Diameter over Jacket / color	48.0 mm / black
Weight	1000 kg/km

• Mechanical characteristics

Tensile force	>3000 N
Minimum bending radius, single bend	700 mm
Indication of slot alignment	Guides opposite to slots
Minimum distance to wall	100 mm
Recommended clamp spacing	1~1.5 m
Installation temperature	-25~+60 °C
Operation temperature	-40~+85 °C
Storage temperature	-70~+85 °C

• Electrical characteristics

Cut-off frequency	1100~1500 MHz
Polarization	Vertical
VSWR	1.3
Impedance	50±2 Ω
Encircle DC resistance	3 Ω/km
Insulation dielectric strength	15000 V (DC, 1min)
Minimum insulation resistance	5000 MΩ·km
Jacket spark test voltage	8000 V (AC)
Peak power	310 kW
Velocity	89 %

Frequency (MHz)	Attenuation (dB/100m, 20 °C)	Coupling Loss (50% / 95%, 2m, dB)
150	0.92	80/90
450	1.70	84/91
800	2.30	66/70
900	2.51	66/68
1800	4.30	65/70
2200	5.45	62/66
2400	6.25	61/66

Range: Coupling Loss: ±5 dB, Attenuation: ±10 %

Notes:

Coupling Loss & Attenuation is tested by the free-space method according to IEC 61196-4 Standards.



MYZ-50-42 (1-5/8")

- The product characterized long electromagnetic radiation distance and is suitable for the coverage of enclosed areas, such as rail tunnels, high speed railway tunnels underground parking and so on. It has strong radiation performance and uniform fluctuation in narrow band.
- Best working frequency range: 300~900 MHz

Performances

• Structure

Cable type	Radiating
Size	1-5/8"
Inner conductor material / OD	Helical copper tube / 17.3 mm
Insulating material	Physical foamed polyethylene dielectric
Outer conductor material / OD	Overlapping copper foil / 43.5 mm
Jacket material	LSOH polyolefin
Diameter over Jacket / color	48.0 mm / black
Weight	1000 kg/km

• Mechanical characteristics

Tensile force	>3000 N
Minimum bending radius, single bend	700 mm
Indication of slot alignment	Guides opposite to slots
Minimum distance to wall	100 mm
Recommended clamp spacing	1~1.5 m
Installation temperature	-25~+60 °C
Operation temperature	-40~+85 °C
Storage temperature	-70~+85 °C

• Electrical characteristics

Cut-off frequency	510~530MHz & Its multiples
Polarization	Vertical
VSWR	1.3
Impedance	50±2 Ω
Encircle DC resistance	3 Ω/km
Insulation dielectric strength	15000 V (DC, 1min)
Minimum insulation resistance	5000 MΩ·km
Jacket spark test voltage	8000 V (AC)
Peak power	310 kW
Velocity	89 %

Frequency (MHz)	Attenuation (dB/100m, 20 °C)	Coupling Loss (50% / 95%, 2m, dB)
150	0.88	75/84
350	1.45	69/76
450	1.71	70/75
800	2.45	68/72
900	2.70	69/73

Range: Coupling Loss: ±5 dB, Attenuation: ±10 %

Notes:

Coupling Loss & Attenuation is tested by the free-space method according to IEC 61196-4 Standards.

CTAYZ-50-22-C2 (7/8")

- The product is applicable for the coverage of density in long, narrow and enclosed areas such as mines, buildings and elevators etc. It has little fluctuation of electromagnetic density and uniform coverage in broadband.
- Best working frequency range: 50~3000 MHz

Performances

• Structure

Cable type	Coupling
Size	7/8"
Inner conductor material / OD	Copper tube / 9.0 mm
Insulating material	Physical foamed polyethylene dielectric
Outer conductor material / OD	Annular corrugated copper tube milled / single slots
Jacket material	LSOH polyolefin
Diameter over Jacket / color	27.5 mm / black
Weight	510 kg/km

• Mechanical characteristics

Tensile force	>1500 N
Minimum bending radius, single bend	300 mm
Indication of slot alignment	Guides opposite to slots
Minimum distance to wall	100 mm
Recommended clamp spacing	0.9 m
Installation temperature	-25~+60 °C
Operation temperature	-40~+85 °C
Storage temperature	-70~+85 °C

• Electrical characteristics

Cut-off frequency	50~3000 MHz
Polarization	Vertical
VSWR	1.3
Impedance	50±2 Ω
Encircle DC resistance	3 Ω/km
Insulation dielectric strength	6000 V (DC, 1min)
Minimum insulation resistance	5000 MΩ·km
Jacket spark test voltage	8000 V (AC)
Peak power	91 kW
Velocity	88 %

Frequency (MHz)	Attenuation (dB/100m, 20 °C)	Coupling Loss (50% / 95%, 2m, dB)
150	1.80	64/74
450	3.30	70/80
800	4.80	78/80
900	4.90	77/79
1800	7.95	71/79
2200	8.75	72/78
2400	9.20	71/80

Range: Coupling Loss: ±5 dB, Attenuation: ±10 %

Notes:

Coupling Loss & Attenuation is tested by the free-space method according to IEC 61196-4 Standards.



TAYZ-50-22-C1 (7/8")

- The product is applicable for the coverage of density in long, narrow and enclosed areas such as mines, buildings and elevators etc. It has little fluctuation of electromagnetic density and uniform coverage in broadband.
- Best working frequency range: 50~3000 MHz

Performances

• Structure

Cable type	Coupling
Size	7/8"
Inner conductor material / OD	Copper tube / 9.0 mm
Insulating material	Physical foamed polyethylene dielectric
Outer conductor material / OD	Annular corrugated copper tube milled / single slots
Jacket material	LSOH polyolefin
Diameter over Jacket / color	27.5 mm / black
Weight	510 kg/km

• Mechanical characteristics

Tensile force	>1500 N
Minimum bending radius, single bend	300 mm
Indication of slot alignment	Guides opposite to slots
Minimum distance to wall	100 mm
Recommended clamp spacing	0.9 m
Installation temperature	-25~+60 °C
Operation temperature	-40~+85 °C
Storage temperature	-70~+85 °C

• Electrical characteristics

Cut-off frequency	50~3000 MHz
Polarization	Vertical
VSWR	1.3
Impedance	50±2 Ω
Encircle DC resistance	3 Ω/km
Insulation dielectric strength	6000 V (DC, 1min)
Minimum insulation resistance	5000 MΩ·km
Jacket spark test voltage	8000 V (AC)
Peak power	91 kW
Velocity	88 %

Frequency (MHz)	Attenuation (dB/100m, 20 °C)	Coupling Loss (50% / 95%, 2m, dB)
150	1.60	68/78
450	2.75	68/79
800	3.73	69/79
900	4.21	69/79
1800	6.36	68/78
2200	7.23	69/79
2400	7.56	70/80

Range: Coupling Loss: ±5 dB, Attenuation: ±10 %

Notes:

Coupling Loss & Attenuation is tested by the free-space method according to IEC 61196-4 Standards.



LCTAYZ-50-32-C2 (1-1/4")

- The product is applicable for the coverage of density in long, narrow and enclosed areas such as mines, buildings and elevators etc. It has little fluctuation of electromagnetic density and uniform coverage in broadband.
- Best working frequency range: 50~3000 MHz

Performances

• Structure

Cable type	Coupling
Size	1-1/4"
Inner conductor material / OD	Copper tube / 13.1 mm
Insulating material	Physical foamed polyethylene dielectric
Outer conductor material / OD	Annular corrugated copper tube milled / single slots
Jacket material	LSOH polyolefin
Diameter over Jacket / color	38.4 mm / black
Weight	850 kg/km

• Mechanical characteristics

Tensile force	>2600 N
Minimum bending radius, single bend	500 mm
Indication of slot alignment	Guides opposite to slots
Minimum distance to wall	100 mm
Recommended clamp spacing	1~1.2 m
Installation temperature	-25~+60 °C
Operation temperature	-40~+85 °C
Storage temperature	-70~+85 °C

• Electrical characteristics

Cut-off frequency	50~3000 MHz
Polarization	Vertical
VSWR	1.3
Impedance	50±2 Ω
Encircle DC resistance	3 Ω/km
Insulation dielectric strength	10000 V (DC, 1min)
Minimum insulation resistance	5000 MΩ·km
Jacket spark test voltage	8000 V (AC)
Peak power	200 kW
Velocity	88 %

Frequency (MHz)	Attenuation (dB/100m, 20 °C)	Coupling Loss (50% / 95%, 2m, dB)
150	1.25	61/71
450	2.55	67/78
800	3.69	67/78
900	3.87	68/77
1800	6.68	70/79
2200	9.63	66/76
2400	9.85	68/79

Range: Coupling Loss: ±5 dB, Attenuation: ±10 %



Notes:

Coupling Loss & Attenuation is tested by the free-space method according to IEC 61196-4 Standards.

TAYZ-50-32-C1 (1-1/4")

- The product is applicable for the coverage of density in long, narrow and enclosed areas such as mines, buildings and elevators etc. It has little fluctuation of electromagnetic density and uniform coverage in broadband.
- Best working frequency range: 50~3000 MHz

Performances



• Structure

Cable type	Coupling
Size	1-1/4"
Inner conductor material / OD	Copper tube / 13.1 mm
Insulating material	Physical foamed polyethylene dielectric
Outer conductor material / OD	Annular corrugated copper tube milled / single slots
Jacket material	LSOH polyolefin
Diameter over Jacket / color	38.4 mm / black
Weight	850 kg/km

• Mechanical characteristics

Tensile force	>2600 N
Minimum bending radius, single bend	500 mm
Indication of slot alignment	Guides opposite to slots
Minimum distance to wall	100 mm
Recommended clamp spacing	1~1.2 m
Installation temperature	-25~+60 °C
Operation temperature	-40~+85 °C
Storage temperature	-70~+85 °C

• Electrical characteristics

Cut-off frequency	50~3000 MHz
Polarization	Vertical
VSWR	1.3
Impedance	50±2 Ω
Encircle DC resistance	3 Ω/km
Insulation dielectric strength	10000 V (DC, 1min)
Minimum insulation resistance	5000 MΩ·km
Jacket spark test voltage	8000 V (AC)
Peak power	200 kW
Velocity	88 %

Frequency (MHz)	Attenuation (dB/100m, 20 °C)	Coupling Loss (50% / 95%, 2m, dB)
150	1.20	67/75
450	2.30	73/83
800	3.25	75/85
900	3.60	76/86
1800	6.00	77/88
2200	6.20	78/87
2400	6.90	80/88

Range: Coupling Loss: ±5 dB, Attenuation: ±10 %

Notes:

Coupling Loss & Attenuation is tested by the free-space method according to IEC 61196-4 Standards.

(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℃~+70℃

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	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.

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



(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	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.

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	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.

(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℃~+70℃

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	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.

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	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.

(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℃~+70℃

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	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.

(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℃~+70℃

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	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.

(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℃~+70℃

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	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.

(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℃~+70℃

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	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.

(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℃~+70℃

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	800~1000	1.40
	1700~2300	1.40

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.

(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

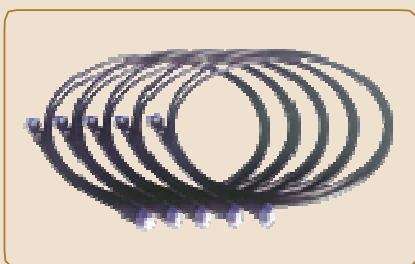
Charateristic impedance (Ω)		50±1
Relative propagation velocity (%)		88
Capacitance (PF/m)		76
Minimum insulation resistance(DC 500V 1 minute)		3000MΩ·km
Peak power rating (kW)		6.4
VSWR	800~1000	1.12
	1700~2300	1.12

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.

Jumpers



- Xtra Corp 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(Ω)		50	50	50
Insulated resistance(M Ω)		≥ 5000	≥ 5000	≥ 5000
Dielectric strength(V)		2500	2000	2500
Frequency range(GHz)		0~3	0~3	0~3
VSWR	0~3000MHz	≤ 1.1	≤ 1.1	≤ 1.1
	800~1000MHz	≤ 1.06	≤ 1.06	≤ 1.06
	1700~2500MHz	≤ 1.08	≤ 1.08	≤ 1.08
Work voltage(V)		1500	1500	1500

Connectors



- Connectors provided by Xtra Corp 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(Ω)		50	50	50
Frequency range		1M~11GHz	0~18GHz	0~3GHz
Dielectric strength(Min at sea level)(V)		2500	500	1500
VSWR		$\leq 1.06(1M-3G)$ $\leq 1.08(3G-11G)$	$\leq 1.2(0-3G)$ $\leq 1.4(3-18G)$	$\leq 1.15(0-3G)$
Contact resistance	Inner conductor(m Ω)	≤ 0.8	≤ 5	≤ 5
	Outer conductor(m Ω)	≤ 0.4	≤ 2.5	≤ 2.5
Insulated resistance(m Ω)		≥ 5000	≥ 5000	≥ 5000
Insertion loss(dB)		≤ 0.1	≤ 0.1	≤ 0.1
Center retentivity(N)		> 0.6	> 0.28	> 0.57
Durability(cycles)		≥ 500	≥ 500	≥ 500

(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	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.

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)

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	Φ 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	Φ 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	Φ D(mm)
1/2"	1*1/2"	16
7/8"	1*7/8"	27.5

- Throat hoop type



Item	Type	Φ 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	Φ D(mm)
7/8"	1*7/8"	27.5
7/8"	2*7/8"	27.5
7/8"	3*7/8"	27.5

Other Accessories

- Grounding bracket



- Tie wraps



- Daub & Adhesive tape



- Arrester



- Wall entry system



- Load



- Cold shrink weather proofing kits



- Hoisting grips



- Feeder markin

