

OPISYS Incorporated

511 S. HARBOR BLVD UNIT P
LA HABRA CA 90631 USA
E-MAIL : Justin.park@aceteq.com

Subject: Antenna Kitting

FCC ID: **Q4EUSHR-781921-5B**

The antenna kitting options for model **USHR-781921-5B** signal booster were done for 3 Outdoor Antenna kit options and 3 Indoor Antenna kit options.

The repeater(**USHR-781921-8B**) uses four of the RF cable.

The order of the attached calculations is as follows:

1. List of approved antenna

Item	Model	Gain(698~806)	Gain(806~960)	Gain(1710~2500)
Service Antenna (Indoor Antenna)	TS260771	+8dBi	+8dBi	+8dBi
	TS250374	+5dBi	+5dBi	+5dBi
	TQI-700/2700-SJ-01	+2dBi	+2.5dBi	+5dBi
Donnor Antenna (Outdoor Antenna)	TS210471	+4.5dBi	+4.5dBi	+4.5dBi
	TS220971	+9dBi	+9dBi	+9dBi
	TDI-690/2500-SJ	+7dBi	+7dBi	+8dBi

2. List of approved RF cable

Model	Cable Type
AC200000	LMR200
TS320000	RF240
TS340000	RF400
TS350000	1/2"
TS360000	1/2"

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3. In case of minimum cable loss and antenna gain

3.1 Downlink(Indoor Antenna)

3.1.1 Down Link(698 ~ 960MHz)

①Conducted power(dBm)	②RF Coaxial Cable Loss(dB)	RF Coaxial Cable Model	③Antenna Gain(dB)	Antenna Model	EIRP (①+②+③) dBm
2	-1.1	AC200000	8	TS260771	8.9
2	-1.1	AC200000	5	TS250374	5.9
2	-1.1	AC200000	2	TQI-700/2700-SJ-01	2.9
2	-1.0	TS320000	8	TS260771	9.0
2	-1.0	TS320000	5	TS250374	6.0
2	-1.0	TS320000	2	TQI-700/2700-SJ-01	3.0
2	-1.0	TS340000	8	TS260771	9.0
2	-1.0	TS340000	5	TS250374	6.0
2	-1.0	TS340000	2	TQI-700/2700-SJ-01	3.0
2	-0.9	TS350000	8	TS260771	9.1
2	-0.9	TS350000	5	TS250374	6.1
2	-0.9	TS350000	2	TQI-700/2700-SJ-01	3.1
2	-0.9	TS360000	8	TS260771	9.1
2	-0.9	TS360000	5	TS250374	6.1
2	-0.9	TS360000	2	TQI-700/2700-SJ-01	3.1

3.1.2 Down Link(1710~ 2500MHz)

① Conducted power(dBm)	②RF Coaxial Cable Loss(dB)	RF Coaxial Cable Model	③Antenna Gain(dB)	Antenna Model	EIRP(①+②+③) dBm
2	-1.3	AC200000	8	TS260771	8.7
2	-1.3	AC200000	5	TS250374	5.7
2	-1.3	AC200000	5	TQI-700/2700-SJ-01	5.7
2	-1.1	TS320000	8	TS260771	8.9
2	-1.1	TS320000	5	TS250374	5.9
2	-1.1	TS320000	5	TQI-700/2700-SJ-01	5.9
2	-1.2	TS340000	8	TS260771	8.8
2	-1.2	TS340000	5	TS250374	5.8
2	-1.2	TS340000	5	TQI-700/2700-SJ-01	5.8
2	-1.0	TS350000	8	TS260771	9.1
2	-1.0	TS350000	5	TS250374	6.1
2	-1.0	TS350000	5	TQI-700/2700-SJ-01	6.1
2	-0.9	TS360000	8	TS260771	9.1
2	-0.9	TS360000	5	TS250374	6.1
2	-0.9	TS360000	5	TQI-700/2700-SJ-01	6.1

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3.2 Uplink(Outdoor Antenna)

3.2.1 Up Link(698 ~ 960MHz)

①Conducted power(dBm)	②RF Coaxial Cable Loss(dB)	RF Coaxial Cable Model	③Antenna Gain(dB)	Antenna Model	EIRP(①+②+③) dBm
23	-4.0	AC200000	4.5	TS210471	23.5
23	-4.0	AC200000	9	TS220971	28.0
23	-4.0	AC200000	7	TDI-690/2500-SJ	26.0
23	-2.8	TS320000	4.5	TS210471	24.7
23	-2.8	TS320000	9	TS220971	29.2
23	-2.8	TS320000	7	TDI-690/2500-SJ	27.2
23	-2.8	TS340000	4.5	TS210471	24.7
23	-2.8	TS340000	9	TS220971	29.2
23	-2.8	TS340000	7	TDI-690/2500-SJ	27.2
23	-2.1	TS350000	4.5	TS210471	25.4
23	-2.1	TS350000	9	TS220971	29.9
23	-2.1	TS350000	7	TDI-690/2500-SJ	27.9
23	-2.1	TS360000	4.5	TS210471	25.4
23	-2.1	TS360000	9	TS220971	29.9
23	-2.1	TS360000	7	TDI-690/2500-SJ	27.9

3.2.2 Up Link(1710 ~ 2500MHz)

①Conducted power(dBm)	②RF Coaxial Cable Loss(dB)	RF Coaxial Cable Model	③Antenna Gain(dB)	Antenna Model	EIRP(①+②+③) dBm
23	-3.1	AC200000	4.5	TS210471	24.4
23	-3.1	AC200000	9	TS220971	28.9
23	-3.1	AC200000	7	TDI-690/2500-SJ	26.9
23	-2.4	TS320000	4.5	TS210471	25.1
23	-2.4	TS320000	9	TS220971	29.6
23	-2.4	TS320000	7	TDI-690/2500-SJ	27.6
23	-2.6	TS340000	4.5	TS210471	24.9
23	-2.6	TS340000	9	TS220971	29.4
23	-2.6	TS340000	7	TDI-690/2500-SJ	27.4
23	-3.8	TS350000	4.5	TS210471	23.7
23	-3.8	TS350000	9	TS220971	28.2
23	-3.8	TS350000	7	TDI-690/2500-SJ	26.2
23	-2.8	TS360000	4.5	TS210471	24.7
23	-2.8	TS360000	9	TS220971	29.2
23	-2.8	TS360000	7	TDI-690/2500-SJ	27.2

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Sincerely Yours,



Karen Kyung Hee Koo
C.E.O.

Donor Antenna Specification(Outdoor Antenna)

Model Name : TS210471

◆ Specification

Electrical Specifications			
Frequency Range	698-806 MHz	806-960MHz	1710-2170MHz
Polarization	Vertical		
VSWR	≤2.0	≤1.5	≤1.5
Gain	3.5/4.5dBi		
Input Impedance	50Ω		
3dB Beamwidth	H:360° E:60°		
Max.Power	50W		
Lightning Protection	DC Ground		
Mechanical Specifications			
Connector Type	N-female		
Dimensions	Ø60×250 mm (Ø 2.36x63.5in)		
Antenna weight	1.0kgs		
Reflector material	Copper		
Radome material	UV-PVC		
Radome color	White		
Wind Speed, maximum	216.0 km/h		
Operating Temperature	-40°C to +60 °C (40°F to +140 °F)		
Mounting pole	Ø38-Ø52mm		

◆ Photo



Donor Antenna Specification(Outdoor Antenna)

Model Name : TS220971

◆ Specification

Electrical Specifications			
Frequency Range	698-806MHz	806-960MHz	1710-2700MHz
Polarization	Vertical		
VSWR	≤1.7	≤1.5	≤1.5
Gain	9dBi		
3dB Beamwidth	H: 90° E: 60°		
F/B Ratio	≥16dB		
Input Impedance	50Ω		
Max.Power	50W		
Lightning Protection	DC Ground		
Mechanical Specifications			
Connector	N-female		
Pigtail Cable	RG58U		
Mount Type	Mast Mount		
Dimensions	295×210×65mm		
Packing Size	45x34x47cm/ 10pcs		
Antenna weight	0.90kgs		
Reflector material	Aluminum		
Radome material	ABS		
Radome color	White		
Wind Speed, maximum	180 km/h		
Operating temperature	-40°C to +60 °C (40°F to +140 °F)		

◆ Photo



Donor Antenna Specification(Outdoor Antenna)

Model Name : TDI-690/2500-SJ

◆ Specification

Electrical specifications			
Frequency range (MHz)	698-806	806~960	1710~2500
Polarization	Vertical		
Gain (dBi)	7	7	8
Half-power beam width (°)	Hor:95 TYP.	Hor:85 TYP.	Hor:75 TYP.
Front-to-back ratio (dB)	15 TYP.		
Impedance (Ω)	50		
VSWR	698-806≤1.6 806-960MHZ≤1.5 1710-2170MHZ≤1.5 2200-2500MHZ≤1.5		
Intermodulation IM3 (2×43dBm carrier)	≤-140dBc		
Maximum input power (W)	150		

Mechanical specifications	
Connector	1×N-Female With Cable Rg141 of 1M length
Connector position	Bottom
Height×width×depth (mm)	210×180×44
Antenna weight (kg)(with installation kit)	0.65
Packing weight (kg)	1.2
Reflector material	Aluminum Alloy
Radome material	UV ABS
Radome color	white
Operating temperature (°C)	-40~60
Mounting hardware (mm)	Mounting on the wall

◆ Photo



Service Antenna Specification(Indoor Antenna)

Model Name : TS260771

◆ Specification

Electrical Specifications				
Frequency Range	698-806MHz z	806-960MHz z	1710-2500MHz Hz	2500-2700 MHz
Polarization	Vertical			
VSWR	≤1.8	≤1.5	≤1.5	≤1.8
Gain	7/8 dBi			
3dB Beamwidth	H:65° E:55°			
F/B Ratio	≥15dB			
Input Impedance	50Ω			
Max.Power	50W			
Lightning Protection	DC Ground			
Mechanical Specifications				
Connector	N-female			
Pigtail Cable	RG58U			
Mount Type	Wall Mount			
Dimensions	210×180×43mm			
Packing Size	52x33x41cm/ 20pcs			
Antenna weight	0.6kg			
Reflector material	Aluminum			
Radome material	ABS			
Radome color	White			
Operating Temperature	-40°C to +60 °C (40°F to +140 °F)			
Relative Humidity	Up to 100%			

◆ Photo



Service Antenna Specification(Indoor Antenna)

Model Name : TS250374

◆ Specification

Electrical Specifications				
Frequency Range	698-806 MHz	806-960 MHz	1710-2500 MHz	2500-2700 MHz
Polarization	Vertical			
VSWR	≤1.8	≤1.5	≤1.5	≤1.5
Gain	2.5/5 dBi			
3dB Beamwidth	H:360° E:60°			
Input Impedance	50Ω			
Max.Power	50W			
Lightning Protection	DC Ground			
Mechanical Specifications				
Connector	N-female			
Pigtail Cable	RG58U			
Mount Type	Ceiling Mount			
Dimensions	Ø186×86 mm			
Packing Size	78x33x37cm/ 20pcs			
Antenna weight	260g			
Reflector material	Aluminum			
Radome material	ABS			
Radome color	White			
Operating temperature	-40℃ to +60 ℃ (40°F to +140 ℃F)			
Relative Humidity	Up to 100%			

◆ Photo



Service Antenna Specification(Indoor Antenna)

Model Name : TQI-700/2700-SJ-01

◆ Specification

Electrical specifications		
Frequency range (MHz)	698-960	1710-2700
Polarization	Vertical	
Gain (dBi)	1.5±0.5 698-800; 2±0.5 801-960	>5 1710-2700
Half-power beam width (°)	Hor:360 Ver:100	Hor:360 Ver:40
Impedance (Ω)	50	
VSWR	698-800≤1.8; 800-960@1710-2700≤1.5	
Intermodulation IM3 (2×33dBm carrier)	<-107dBm	
Maximum input power (W)	50	
Lightning protection	DC Ground	

Mechanical specifications	
Connector	1×N-Female With Cable Rg141 of 300mm length
Connector position	Bottom
Height×Diameter (mm)	φ 184×80
Packing size (mm)	180×180×180
Antenna weight (kg)(with installation kit)	0.3
Packing weight (kg)	0.43
Radome material	UV ABS
Radome color	white
Operating temperature (℃)	-40~60
Mounting hardware (mm)	Mount On The Ceiling

◆ Photo



EIRP & Antenna Kitting Information

1. Antenna Gain

Item	Model	Gain(698~806)	Gain(806~960)	Gain(1710~2500)
Service Antenna (Indoor Antenna)	TS260771	+8dBi	+8dBi	+8dBi
	TS250374	+5dBi	+5dBi	+5dBi
	TQI-700/2700-SJ-01	+2dBi	+2.5dBi	+5dBi
Donnor Antenna (Outdoor Antenna)	TS210471	+4.5dBi	+4.5dBi	+4.5dBi
	TS220971	+9dBi	+9dBi	+9dBi
	TDI-690/2500-SJ	+7dBi	+7dBi	+8dBi

2. RF Cable Loss(Min Loss at 698MHz) / 698 ~ 960MHz

2.1 Minimum Cable Length & Loss

Model	Cable Type	Frequency(MHz)	Cable Loss/1m	Minimum Cable Length(m)		N-Type connection loss when assembled	Total Loss(dB)	
				Downlink port ↔Indoor Ant	Uplink port ↔ Outdoor Ant		Downlink port ↔Indoor Ant	Uplink port ↔ Outdoor Ant
AC200000	LMR200	698~2200	-0.32	1	10	-0.8	-1.1	-4.0
TS320000	RF240	698~2200	-0.2	1	10	-0.8	-1.0	-2.8
TS340000	RF400	698~2200	-0.2	1	10	-0.8	-1.0	-2.8
TS350000	1/2"	698~2200	-0.066	1	20	-0.8	-0.9	-2.1
TS360000	1/2"	698~2200	-0.063	1	20	-0.8	-0.9	-2.1

2.2 Maximum Cable Length & Loss

Model	Cable Type	Frequency(MHz)	Cable Loss/1m	Maximum Cable Length(m)		N-Type connection loss when assembled	Total Loss(dB)	
				Downlink port ↔Indoor Ant	Uplink port ↔ Outdoor Ant		Downlink port ↔Indoor Ant	Uplink port ↔ Outdoor Ant
AC200000	LMR200	698~2200	-0.32	50	50	-0.8	-16.8	-16.8
TS320000	RF240	698~2200	-0.2	100	100	-0.8	-20.8	-20.8
TS340000	RF400	698~2200	-0.2	100	100	-0.8	-20.8	-20.8
TS350000	1/2"	698~2200	-0.066	300	300	-0.8	-20.6	-20.6
TS360000	1/2"	698~2200	-0.063	300	300	-0.8	-19.7	-19.7

3. RF Cable Loss(Min Loss at 1710MHz) / 1710 ~ 2500MHz

2.1 Minimum Cable Length & Loss

Model	Cable Type	Frequency(MHz)	Cable Loss/1m	Minimum Cable Length(m)		N-Type connection loss when assembled	Total Loss(dB)	
				Downlink port ↔Indoor Ant	Uplink port ↔ Outdoor Ant		Downlink port ↔Indoor Ant	Uplink port ↔ Outdoor Ant
AC200000	LMR200	698~2200	-0.466	1	5	-0.8	-1.3	-3.1
TS320000	RF240	698~2200	-0.32	1	5	-0.8	-1.1	-2.4
TS340000	RF400	698~2200	-0.365	1	5	-0.8	-1.2	-2.6
TS350000	1/2"	698~2200	-0.15	1	20	-0.8	-1.0	-3.8
TS360000	1/2"	698~2200	-0.099	1	20	-0.8	-0.9	-2.8

2.2 Maximum Cable Length & Loss

Model	Cable Type	Frequency(MHz)	Cable Loss/1m	Maximum Cable Length(m)		N-Type connection loss when assembled	Total Loss(dB)	
				Downlink port ↔Indoor Ant	Uplink port ↔ Outdoor Ant		Downlink port ↔Indoor Ant	Uplink port ↔ Outdoor Ant
AC200000	LMR200	698~2200	-0.466	50	50	-0.8	-24.1	-24.1
TS320000	RF240	698~2200	-0.32	100	100	-0.8	-32.8	-32.8
TS340000	RF400	698~2200	-0.365	100	100	-0.8	-37.3	-37.3
TS350000	1/2"	698~2200	-0.15	300	300	-0.8	-45.8	-45.8
TS360000	1/2"	698~2200	-0.099	300	300	-0.8	-30.5	-30.5

4. EIRP Calculation

4.1 Down Link(698 ~ 960MHz) : Min Cable Length & Loss

①Conducted power(dBm)	②RF Coaxial Cable Loss(dB)	RF Coaxial Cable Model	③Antenna Gain(dB)	Antenna Model	EIRP(①+②+③) dBm
2	-1.1	AC200000	8	TS260771	8.9
2	-1.1	AC200000	5	TS250374	5.9
2	-1.1	AC200000	2	TQI-700/2700-SJ-01	2.9
2	-1.0	TS320000	8	TS260771	9.0
2	-1.0	TS320000	5	TS250374	6.0
2	-1.0	TS320000	2	TQI-700/2700-SJ-01	3.0
2	-1.0	TS340000	8	TS260771	9.0
2	-1.0	TS340000	5	TS250374	6.0
2	-1.0	TS340000	2	TQI-700/2700-SJ-01	3.0
2	-0.9	TS350000	8	TS260771	9.1
2	-0.9	TS350000	5	TS250374	6.1
2	-0.9	TS350000	2	TQI-700/2700-SJ-01	3.1
2	-0.9	TS360000	8	TS260771	9.1
2	-0.9	TS360000	5	TS250374	6.1
2	-0.9	TS360000	2	TQI-700/2700-SJ-01	3.1

4.2 Down Link(698 ~ 960MHz) : Max Cable Length & Loss

①Conducted power(dBm)	②RF Coaxial Cable Loss(dB)	RF Coaxial Cable Model	③Antenna Gain(dB)	Antenna Model	EIRP(①+②+③) dBm
2	-16.8	AC200000	8	TS260771	-6.8
2	-16.8	AC200000	5	TS250374	-9.8
2	-16.8	AC200000	2	TQI-700/2700-SJ-01	-12.8
2	-20.8	TS320000	8	TS260771	-10.8
2	-20.8	TS320000	5	TS250374	-13.8
2	-20.8	TS320000	2	TQI-700/2700-SJ-01	-16.8
2	-20.8	TS340000	8	TS260771	-10.8
2	-20.8	TS340000	5	TS250374	-13.8
2	-20.8	TS340000	2	TQI-700/2700-SJ-01	-16.8
2	-20.6	TS350000	8	TS260771	-10.6
2	-20.6	TS350000	5	TS250374	-13.6
2	-20.6	TS350000	2	TQI-700/2700-SJ-01	-16.6
2	-19.7	TS360000	8	TS260771	-9.7
2	-19.7	TS360000	5	TS250374	-12.7
2	-19.7	TS360000	2	TQI-700/2700-SJ-01	-15.7

4.3 Down Link(1710~ 2500MHz) : Min Cable Length & Loss

①Conducted power(dBm)	②RF Coaxial Cable Loss(dB)	RF Coaxial Cable Model	③Antenna Gain(dB)	Antenna Model	EIRP(①+②+③) dBm
2	-1.3	AC200000	8	TS260771	8.7
2	-1.3	AC200000	5	TS250374	5.7
2	-1.3	AC200000	5	TQI-700/2700-SJ-01	5.7
2	-1.1	TS320000	8	TS260771	8.9
2	-1.1	TS320000	5	TS250374	5.9
2	-1.1	TS320000	5	TQI-700/2700-SJ-01	5.9
2	-1.2	TS340000	8	TS260771	8.8
2	-1.2	TS340000	5	TS250374	5.8
2	-1.2	TS340000	5	TQI-700/2700-SJ-01	5.8
2	-1.0	TS350000	8	TS260771	9.1
2	-1.0	TS350000	5	TS250374	6.1
2	-1.0	TS350000	5	TQI-700/2700-SJ-01	6.1
2	-0.9	TS360000	8	TS260771	9.1
2	-0.9	TS360000	5	TS250374	6.1
2	-0.9	TS360000	5	TQI-700/2700-SJ-01	6.1

4.4 Down Link(1710~ 2500MHz) : Max Cable Length & Loss

①Conducted power(dBm)	②RF Coaxial Cable Loss(dB)	RF Coaxial Cable Model	③Antenna Gain(dB)	Antenna Model	EIRP(①+②+③) dBm
2	-24.1	AC200000	8	TS260771	-14.1
2	-24.1	AC200000	5	TS250374	-17.1
2	-24.1	AC200000	2	TQI-700/2700-SJ-01	-20.1
2	-32.8	TS320000	8	TS260771	-22.8
2	-32.8	TS320000	5	TS250374	-25.8
2	-32.8	TS320000	2	TQI-700/2700-SJ-01	-28.8
2	-37.3	TS340000	8	TS260771	-27.3
2	-37.3	TS340000	5	TS250374	-30.3
2	-37.3	TS340000	2	TQI-700/2700-SJ-01	-33.3
2	-45.8	TS350000	8	TS260771	-35.8
2	-45.8	TS350000	5	TS250374	-38.8
2	-45.8	TS350000	2	TQI-700/2700-SJ-01	-41.8
2	-30.5	TS360000	8	TS260771	-20.5
2	-30.5	TS360000	5	TS250374	-23.5
2	-30.5	TS360000	2	TQI-700/2700-SJ-01	-26.5

4.5 Up Link(698 ~ 960MHz) : Min Cable Length & Loss

①Conducted power(dBm)	②RF Coaxial Cable Loss(dB)	RF Coaxial Cable Model	③Antenna Gain(dB)	Antenna Model	EIRP(①+②+③) dBm
23	-4.0	AC200000	4.5	TS210471	23.5
23	-4.0	AC200000	9	TS220971	28.0
23	-4.0	AC200000	7	TDI-690/2500-SJ	26.0
23	-2.8	TS320000	4.5	TS210471	24.7
23	-2.8	TS320000	9	TS220971	29.2
23	-2.8	TS320000	7	TDI-690/2500-SJ	27.2
23	-2.8	TS340000	4.5	TS210471	24.7
23	-2.8	TS340000	9	TS220971	29.2
23	-2.8	TS340000	7	TDI-690/2500-SJ	27.2
23	-2.1	TS350000	4.5	TS210471	25.4
23	-2.1	TS350000	9	TS220971	29.9
23	-2.1	TS350000	7	TDI-690/2500-SJ	27.9
23	-2.1	TS360000	4.5	TS210471	25.4
23	-2.1	TS360000	9	TS220971	29.9
23	-2.1	TS360000	7	TDI-690/2500-SJ	27.9

4.5 Up Link(698 ~ 960MHz) : MaxCable Length & Loss

①Conducted power(dBm)	②RF Coaxial Cable Loss(dB)	RF Coaxial Cable Model	③Antenna Gain(dB)	Antenna Model	EIRP(①+②+③) dBm
23	-16.8	AC200000	4.5	TS210471	10.7
23	-16.8	AC200000	9	TS220971	15.2
23	-16.8	AC200000	7	TDI-690/2500-SJ	13.2
23	-20.8	TS320000	4.5	TS210471	6.7
23	-20.8	TS320000	9	TS220971	11.2
23	-20.8	TS320000	7	TDI-690/2500-SJ	9.2
23	-20.8	TS340000	4.5	TS210471	6.7
23	-20.8	TS340000	9	TS220971	11.2
23	-20.8	TS340000	7	TDI-690/2500-SJ	9.2
23	-20.6	TS350000	4.5	TS210471	6.9
23	-20.6	TS350000	9	TS220971	11.4
23	-20.6	TS350000	7	TDI-690/2500-SJ	9.4
23	-19.7	TS360000	4.5	TS210471	7.8
23	-19.7	TS360000	9	TS220971	12.3
23	-19.7	TS360000	7	TDI-690/2500-SJ	10.3

4.7 Up Link(1710 ~ 2500MHz) : Min Cable Length & Loss

①Conducted power(dBm)	② RF Coaxial Cable Loss(dB)	RF Coaxial Cable Model	③Antenna Gain(dB)	Antenna Model	EIRP(①+②+③) dBm
23	-3.1	AC200000	4.5	TS210471	24.4
23	-3.1	AC200000	9	TS220971	28.9
23	-3.1	AC200000	7	TDI-690/2500-SJ	26.9
23	-2.4	TS320000	4.5	TS210471	25.1
23	-2.4	TS320000	9	TS220971	29.6
23	-2.4	TS320000	7	TDI-690/2500-SJ	27.6
23	-2.6	TS340000	4.5	TS210471	24.9
23	-2.6	TS340000	9	TS220971	29.4
23	-2.6	TS340000	7	TDI-690/2500-SJ	27.4
23	-3.8	TS350000	4.5	TS210471	23.7
23	-3.8	TS350000	9	TS220971	28.2
23	-3.8	TS350000	7	TDI-690/2500-SJ	26.2
23	-2.8	TS360000	4.5	TS210471	24.7
23	-2.8	TS360000	9	TS220971	29.2
23	-2.8	TS360000	7	TDI-690/2500-SJ	27.2

4.5 Up Link(698 ~ 960MHz) : MaxCable Length & Loss

①Conducted power(dBm)	② RF Coaxial Cable Loss(dB)	RF Coaxial Cable Model	③Antenna Gain(dB)	Antenna Model	EIRP(①+②+③) dBm
23	-24.1	AC200000	4.5	TS210471	3.4
23	-24.1	AC200000	9	TS220971	7.9
23	-24.1	AC200000	7	TDI-690/2500-SJ	5.9
23	-32.8	TS320000	4.5	TS210471	-5.3
23	-32.8	TS320000	9	TS220971	-0.8
23	-32.8	TS320000	7	TDI-690/2500-SJ	-2.8
23	-37.3	TS340000	4.5	TS210471	-9.8
23	-37.3	TS340000	9	TS220971	-5.3
23	-37.3	TS340000	7	TDI-690/2500-SJ	-7.3
23	-45.8	TS350000	4.5	TS210471	-18.3
23	-45.8	TS350000	9	TS220971	-13.8
23	-45.8	TS350000	7	TDI-690/2500-SJ	-15.8
23	-30.5	TS360000	4.5	TS210471	-3.0
23	-30.5	TS360000	9	TS220971	1.5
23	-30.5	TS360000	7	TDI-690/2500-SJ	-0.5