



**深圳大夏龙雀科技有限公司**  
SHEN ZHEN DX-SMART TECHNOLOGY CO.,LTD.

# **DX-BT18 Antenna Specification**

## **Contact Us**

**Shenzhen DX-SMART Technology Co., Ltd.**

Email: [sales@szdx-smart.com](mailto:sales@szdx-smart.com)

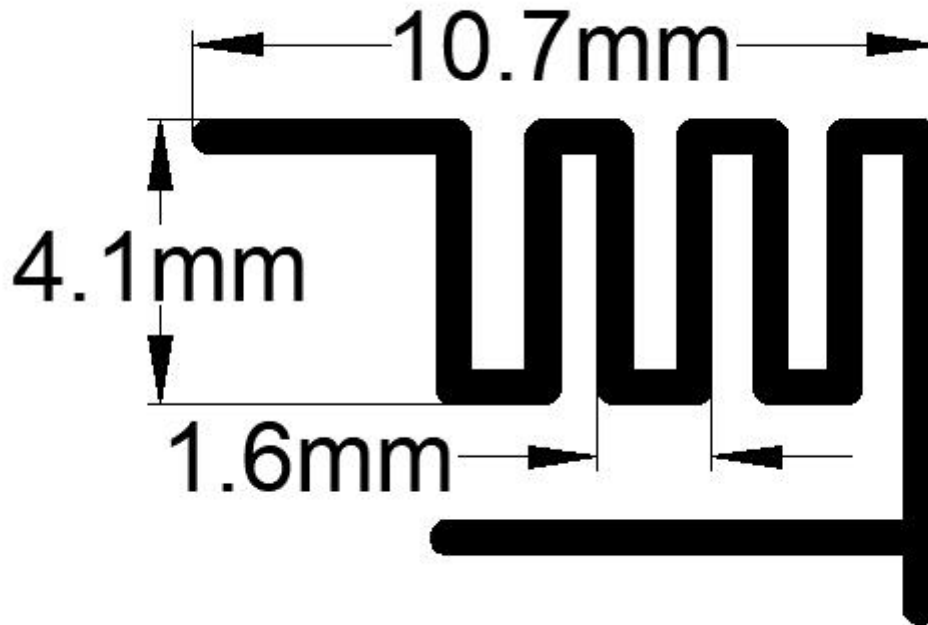
Tel: 0755-29978125

Web: [www.szdx-smart.com](http://www.szdx-smart.com)

Add: Room 601, Block A1, Huafeng Zhigu, Hangkong Road, Baoan District, Shenzhen



## 1. Antenna Size Diagram



## 2. Antenna Efficiency And Gain

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-4.60	-4.45	-4.16	-3.91	-4.10	-4.42	-4.89	-5.15	-5.56	-5.80	-6.19
Gain (dBi)	-0.99	-0.84	-0.50	-0.10	-0.53	-0.92	-1.32	-1.34	-1.61	-1.76	-2.26
Efficiency (%)	34.69	35.87	38.35	40.67	38.90	36.10	32.41	30.53	27.81	26.29	24.05
Directivity (dB)	3.60	3.61	3.67	3.81	3.57	3.51	3.57	3.81	3.94	4.04	3.93
Peak Gain Position (Theta)	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00
Peak Gain Position (Phi)	270.00	270.00	270.00	270.00	270.00	270.00	270.00	270.00	270.00	270.00	270.00
Efficiency ThetaPol (%)	22.46	23.33	25.01	26.51	26.22	24.45	21.97	20.62	18.76	17.73	16.25
Efficiency PhiPol (%)	12.23	12.55	13.34	14.15	12.68	11.65	10.44	9.91	9.05	8.56	7.80
Upper Hem. Efficiency (%)	16.65	17.05	18.15	19.24	18.54	17.03	15.10	14.08	12.74	11.99	10.95
Lower Hem. Efficiency (%)	18.04	18.82	20.20	21.43	20.37	19.07	17.32	16.45	15.07	14.31	13.09

T90(H)Roundness	13.42	14.01	14.68	14.90	13.06	14.30	15.22	16.35	17.22	17.77	19.01
E1(XZ)Wave flap width	89.00	87.00	65.00	62.00	57.00	58.00	77.00	76.00	76.00	76.00	77.00
E1(XZ)front-to-back ratio	4.69	4.81	5.17	5.38	5.62	5.42	5.08	4.86	4.49	4.28	4.12
E2(YZ)Wave flap width	62.00	60.00	60.00	59.00	59.00	57.00	56.00	54.00	54.00	55.00	56.00
E2(YZ)front-to-back ratio	4.14	3.97	3.83	3.80	3.33	3.19	3.08	3.29	3.36	3.38	3.28
Axis ratio at maximum gain(P)	11.64	11.14	10.48	9.99	8.49	8.21	8.00	7.84	7.67	7.55	7.59
vertex(Theta=0)Axis ratio(P)	23.32	19.24	11.31	9.01	12.83	12.84	13.29	14.39	15.52	18.66	21.24
Elevation angle 10 degrees worst (large) axis ratio(P)	49.84	52.52	52.07	52.01	55.35	55.09	51.77	51.29	53.43	54.14	55.70
Hc(XY)Wave flap width	228.00	227.00	228.00	231.00	238.00	234.00	231.00	227.00	223.00	223.00	224.00
Hc(XY)Front to back ratio	0.54	0.52	0.42	0.13	0.07	0.31	0.44	0.64	0.69	0.66	0.75
Left-hand circular polarization efficiency(%)	18.53	19.32	20.68	21.50	19.99	18.77	16.82	15.58	14.05	13.12	11.98
Left-hand circular polarization efficiency(%)	16.16	16.56	17.67	19.16	18.92	17.33	15.59	14.96	13.77	13.17	12.06



2430.0MHz H+V, Eff: 40.7%

Back View

