# BT-0-3GHz

(Preliminary)

### Features

- <sup>1</sup> Used to feed DC voltage and OOK control signals into the feeder cable.
- 2 Low passive intermodulation products, low insertion loss and high power capacity.
- <sup>3</sup> Ultra wide band design for various communication system.
- <sup>4</sup> Small volume, light weight.
- <sup>5</sup> Support AISG 2.0 protocol.

#### Interface

- 1 Input cable length :100mm,
- 2 Input connector: 4.3-10 female
- 3 RF output cable length :100mm,
- 4 RF output connector: 4.3-10 male
- 5 BT output cable length:100mm,
- 6 BT outputconnector: sma female



## **Block Diagram**





## BT-0-2690MHz





Electrical Properties		
Frequency range (MHz)		0 - 2690
Insertion loss (dB)	Port 1 $\leftarrow \rightarrow$ Port 2	≤ 0.3 (617- 2690 MHz)
Isolation for DC signal (dB)	Port 1 $\leftarrow \rightarrow$ Port 2 Port 1 $\leftarrow \rightarrow$ Port 3 DC/OOK	≥ 30
VSWR	Port 1 and Port 2	≤ 1.25 (617 - 2690 MHz)
Input power (W)	Port 1 and Port 2	Avg. ≥ 500 (617 - 960 MHz) Avg. ≥ 250 (1690 - 2690 MHz)
Input current (mA)	Port 3 DC/OOK $\leftarrow \rightarrow$ Port 2	≤ 2300
DC voltage reduction (V)	Port 3 DC/OOK $\leftarrow \rightarrow$ Port 2	$\leq$ 1 (when the current is 2300 mA)
DC supply voltage (V)		0 +30
RF Impedance (Ω)		50
Intermodulation products (dBc)		< -160 (2 x 43 dBm carrier)
Environmental Specification		
Operating temperature ( $^\circ\!\!\!\mathrm{C}$ )		-40 +70
Application scene		Indoor//outdoor
Lightning protection (kA)		3 (10/350 us)
Mechanical Specification		
BT Dimensions (W x H x D) (mm)		48.5 x 30 x 10
Packing dimensions (W x H x D) (mm)		TBD
BT net Weight (kg)		< 0.2
Packing weight (kg)		TBD
Connectors	Port 1 (BTS)	141 cable with connector 4.3-10 female
	Port 2 (Antenna)	141 cablewith connector 4.3-10 male
	Port 3 DC/OOK	141 cable with connector sma female