



1. Features

- ▶ High Performance
- ▶ High Reliability
- ▶ PCS1900 Twin AISG TMA
- ▶ ROHS Compliant

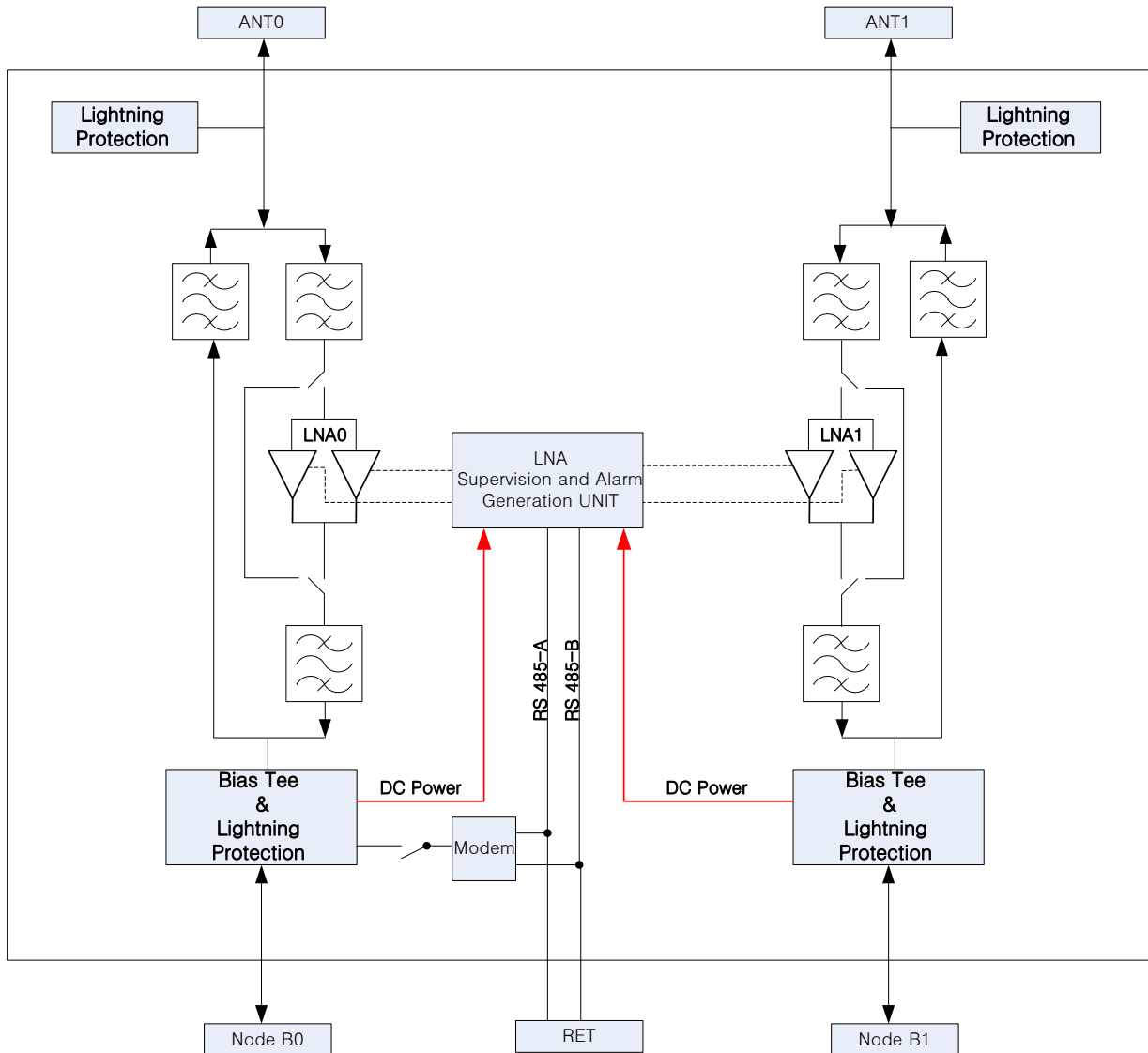
PCS1900M TMA

Part No: RMT US1900MAISG2

Date: January 23, 2014

Revision No: 00

2. Block Diagram





3. Electrical Specifications

	ITEM	Specification	Remark
Uplink	Frequency range	1850 - 1910 MHz	
	Loss in by-pass mode	< 2.5 dB (DC OFF)	
	Return loss	> 18 dB (DC ON) > 12 dB (DC OFF)	
	Gain	24 ±1.0 dB (+22 ~ +28°C) 24 ±1.2 dB (-40 ~ +65°C)	
	Gain ripple	< ±0.3 dB	
	Noise figure *	< 1.4 dB (+22 ~ +28°C)	
	Output 1-dB compression point	> 18dBm	
	3rdorder intercept point (OIP3)	> 25dBm (typically 30dBm)	
Downlink	Frequency range	1930 - 1990 MHz	
	Insertion loss	< 0.5 dB	
	Input power (per input)	< 100 W (+50dBm) CW / < 1.6 kW (+62dBm) peak	
	Intermodulation Products in Rx band	< -110dBm	2Tx carriers At +43dBm
	Return loss	> 18 dB	

* Noise figure NF = (NF1920 MHz + 2 x NF1950 MHz + NF1980 MHz4)/4

* Additional variation at -40 ... +60 °C: ΔNF < 0.4 d

4. Environmental Data

ITEM	Specification	Remark
Operating temperature range	-40°C ~ +65°C	
IP rating	IP67	
MTBF	> 1 000 000 hours (per TMA)	
Lightning protection	IEC 1312-1, 10/350 μs pulse, 50kA	

5. DC and Alarm Specifications

ITEM	Specification	Remark
DC supply	9 – 30 V	
Operating current per TMA Without RET	Nom. 210mA at 9 V Nom. 70mA at 30 V	
Alarm management	AISG 2.0	

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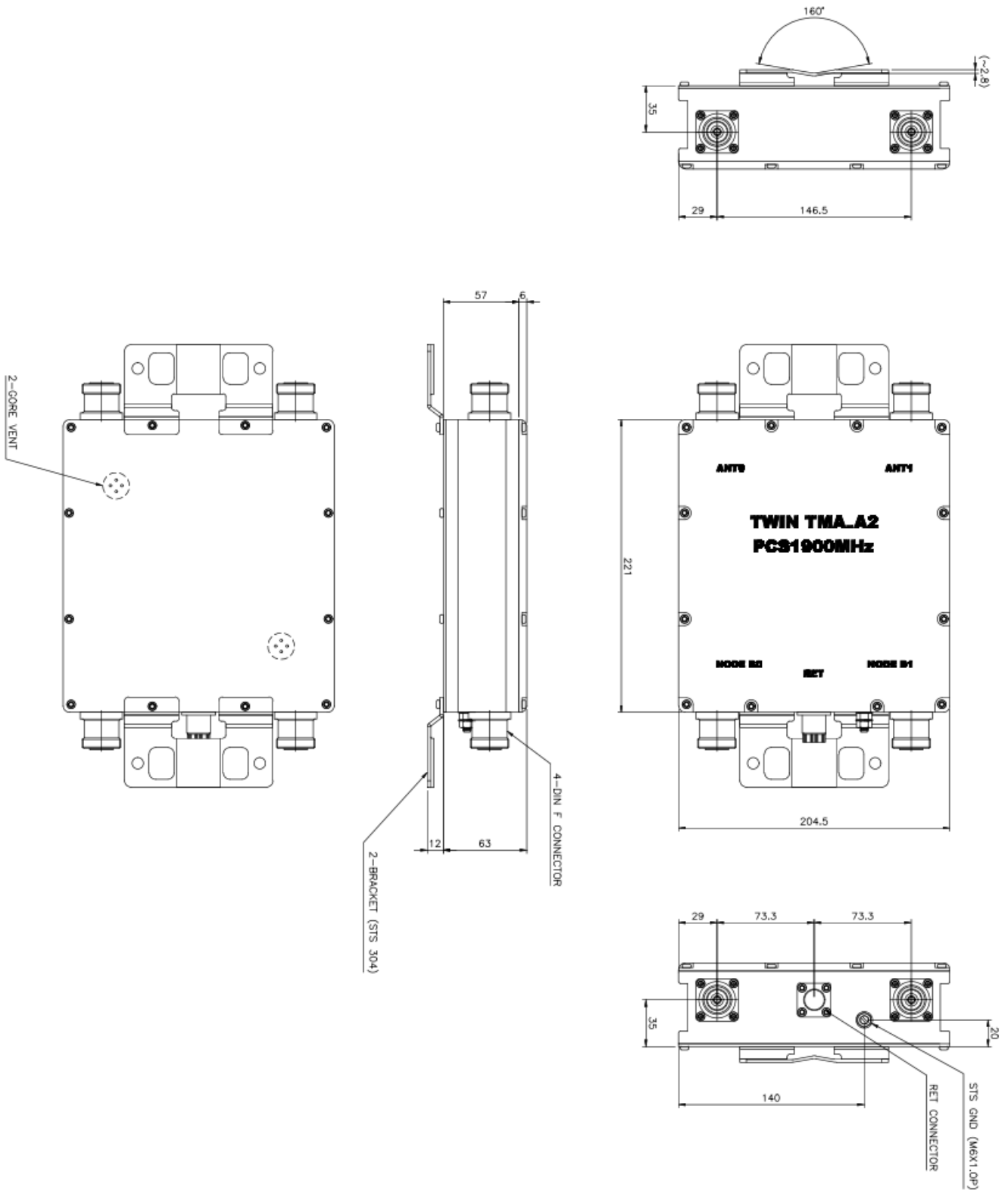
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6. Mechanical Specifications

ITEM		Specification	Remark
Material		Aluminum	
Connectors	RF	7-16 female (long neck)	
	AISG	8-pin female, IEC 60130-9 Pin 3: RS485B, pin 5: RS485A, pin 6: 9 – 30 V DC, pin 7: DC return, other pins: not connected	
Mounting		Wall mounting Mast mounting	
Dimensions (L x W x H)		204.5 X 221.0 X 63.0mm (without connectors, without mounting brackets)	

7. Outline Drawing





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