

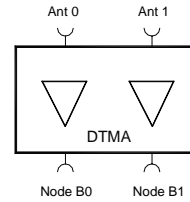
DTMA-UMTS-12-CWA-AISG-FB-BS

Tx-Fullband / Rx-Band Selective Double Dual Duplex

Tower Mounted Amplifier (Masthead Amplifier)

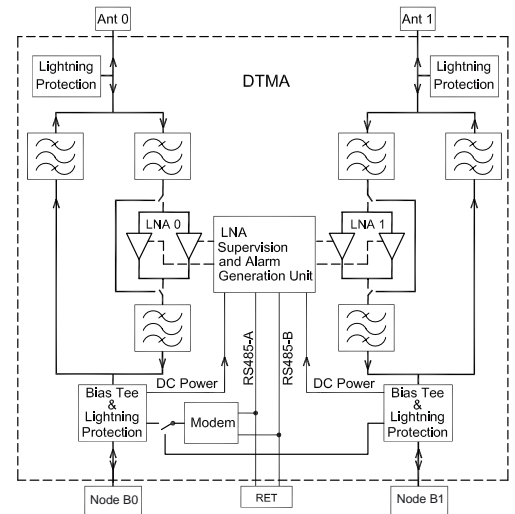
- Double unit for easy use with XPol antennas
- Supports AISG 1.1 and 2.0 (default version see table)
- Kathrein redundancy amplifier design for improved system reliability
- By-pass mode to ensure cell operation in case of DC power down
- Built-in lightning protection
- Compact size
- DC supply
CWA: Via Node B0 and B1
AISG: Via Node B0, Node B1 or both
- Signalling
CWA: Via Node B0 and B1 for each LNA
AISG: Via Node B0, Node B1 for both LNAs
- Suitable for antenna RET control according to AISG/3GPP standard
- **DTMA DC supply and AISG feed via Node B0 or Node B1 port for both TMAs**

RET = Remote Electrical Tilt
AISG = Antenna Interface Standards Group
FB = Full Band in Tx-Band
BS = Band Selective in Rx-Band
CWA = Current Window Alarm



Technical Data

Type	DTMA-UMTS-12-CWA-AISG-FB-BS (12 dB gain)
Tx Characteristics	
Frequency range	2110 – 2170 MHz
Bandwidth	60 MHz
Insertion loss	< 0.4 dB
Ripple	< 0.1 dB
Max. Group Delay	50 ns
Max. Delta Group Delay in 5 MHz Bandwidth	5 ns
Input power	< 100 W (+50 dBm) CW < 1.6 kW (+62 dBm) Peak
Intermodulation products in Rx band	< -122 dBm (2 x 43 dBm carriers)
Return loss	> 18 dB
Rx Characteristics	
Frequency range	factory tunable within 1920 – 1985 MHz
Bandwidth	15 MHz
Loss in by-pass mode	< 3.0 dB (DC OFF)
Gain ripple	< 0.4 dB
Return loss	> 18 dB (DC ON) > 16 dB (DC OFF)
Gain	+22 ... +28 °C: 12 ± 0.5 dB -40 ... +60 °C: 12 ± 1.0 dB
Max. Group Delay	100 ns
Max. Delta Group Delay in 5 MHz Bandwidth	10 ns
Noise figure	< 1.5 dB / 25 °C
Noise figure	< 1.8 dB / 60 °C
Output 1-dB compression point	> 7 dBm
3rd order intercept point (OIP3)	> 17 dBm
Environmental Characteristics	
Operating temperature range	-40 ... +60 °C
IP rating	IP67 *
MTBF	> 1 000 000 hours
EMC	ETS 300 342-3
DC and Alarm Characteristics	
DC supply	9 – 30 V, minus grounded
Alarm management	CWA or according to AISG standard *
Modem Characteristics	According to AISG standard *
Mechanical Characteristics	
Material	Aluminium housing
Connectors	RF: 7-16 female long neck AISG Connector (Compliance 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: NC)
Mounting	Wall mounting: With 4 screws (max. 8 mm diameter) Mast mounting: With additional clamp set
Weight	5 kg
Packing size	262 mm x 502 mm x 214 mm
Dimensions (w x h x d)	166 mm x 262 mm x 77.5 mm (without connectors, without mounting brackets)



Type no.	Rx-Frequency (MHz)	Current in CWA mode (mA)	
		nominal	alarm
AISG 1.1 (default version)			
782 10561	1970 – 1985	50 – 190	230 – 295
782 10562	1970 – 1985	80 – 120	170 – 200
782 10563	1965 – 1980	50 – 190	230 – 295
782 10564	1965 – 1980	80 – 120	170 – 200
782 10565	1950 – 1965	80 – 120	170 – 200
782 10566	1920 – 1935	50 – 190	230 – 295
782 10567	1920 – 1935	80 – 120	170 – 200
782 10568	1950 – 1965	50 – 190	230 – 295

Type no.	Rx-Frequency (MHz)	Current in CWA mode (mA)	
		nominal	alarm
AISG 2.0 (default version)			
782 10569	1970 – 1985	50 – 190	230 – 295
782 10570	1920 – 1935	50 – 190	230 – 295
782 10571	1965 – 1980	50 – 190	230 – 295
782 10579	1965 – 1980	80 – 120	170 – 200

* see note on page 2

