DTMA-850-12-AISG-CWA

Fullband Double Dual Duplex Tower Mounted Amplifier (Masthead Amplifier)

KATHREIN
Antennen · Electronic

- Double unit for easy use with XPol antennas
- Supports CWA, AISG 1.1 and AISG 2.0 (default)
- AISG setting swichable
- CWA and AISG conf guration
- Suitable for antenna RET control according to AISG/3GPP standard
- By-pass mode to ensure cell operation in case of DC power down
- Built-in lightning protection

AISG	=	**A**ntenna **I**nterface **S**tandards **G**roup
RET	=	**R**emote **E**lectrical **T**ilt
CWA	=	**C**urrent **W**indow **A**larm

Technical Data

Type No.	78210874 DTMA-850-12-AISG-CWA	
Tx Characteristics		
Frequency range	869 - 894 MHz	
Insertion loss	Typically 0.35 dB	
Input power (per input)	< 100 W (+50 dBm)/< 1.6 kW (+62 dBm) peak	
Intermodulation products in RX band	< -117 dBm (2 Tx carriers at +43 dBm)	
Return loss	> 18 dB	
Rx Characteristics		
Frequency range	824 - 849 MHz	
Loss in bypass mode	Typically 1.5 dB (DC OFF)	
Return loss	> 18 dB (DC ON) / > 15 dB (DC OFF)	
Gain	12 dB nominal	
Noise f gure	Typically 1.6 dB	
Output 1-dB compression point	> 10 dBm	
3rd order intercept point (OIP3)	Typically 25 dBm	
Environmental Characteristics		
Operating temperature range	-40 ... +65 °C	
IP rating	IP67*	
MTBF	> 1 200 000 hours (per TMA)	
EMC	FCC Part 15	
DC and Alarm Characteristics	CWA Mode	AISG Mode
DC supply	9 - 19 V	9 - 30 V
Operating current per TMA	80 - 130 mA	Nom. 50 mA at 12 V
Alarm management	170 - 200 mA	AISG*
Mechanical Characteristics		
Material	Aluminium housing	
Connectors RF AISG out	7-16 female (long neck) 8-pin female, IEC 60130-9 (Pin 6: 9 - 30 V DC, pin 3: RS485B, pin 5: RS485A, pin 7: DC return, other pins: Not connected)	
Mounting	Wall mounting: With 4 screws (max. 8 mm diameter) Mast mounting: With additional clamp set	
Weight	4.9 kg	
Packing size	380 x 260 x 135 mm	
Dimensions (w x h x d)	168 x 275 x 69 mm (without connectors, without mounting brackets)	

* see note on page 2

Accessories (order separately)

Type No.	Clamp set suitable for mast diameter of
734360	34 - 60 mm
734361	60 - 80 mm
734362	80 - 100 mm
734363	100 - 120 mm
734364	120 - 140 mm
734365	45 - 125 mm
***1311847**	50 - 145 mm

* U.S. Customers order 1311847

936.4548a

Kathrein USA Greenway Plaza II, 2400 Lakeside Blvd., Suite 650, Richardson TX 75082
Phone: 214.238.8800 Fax: 214.238.8801 Email: info@kathrein.com

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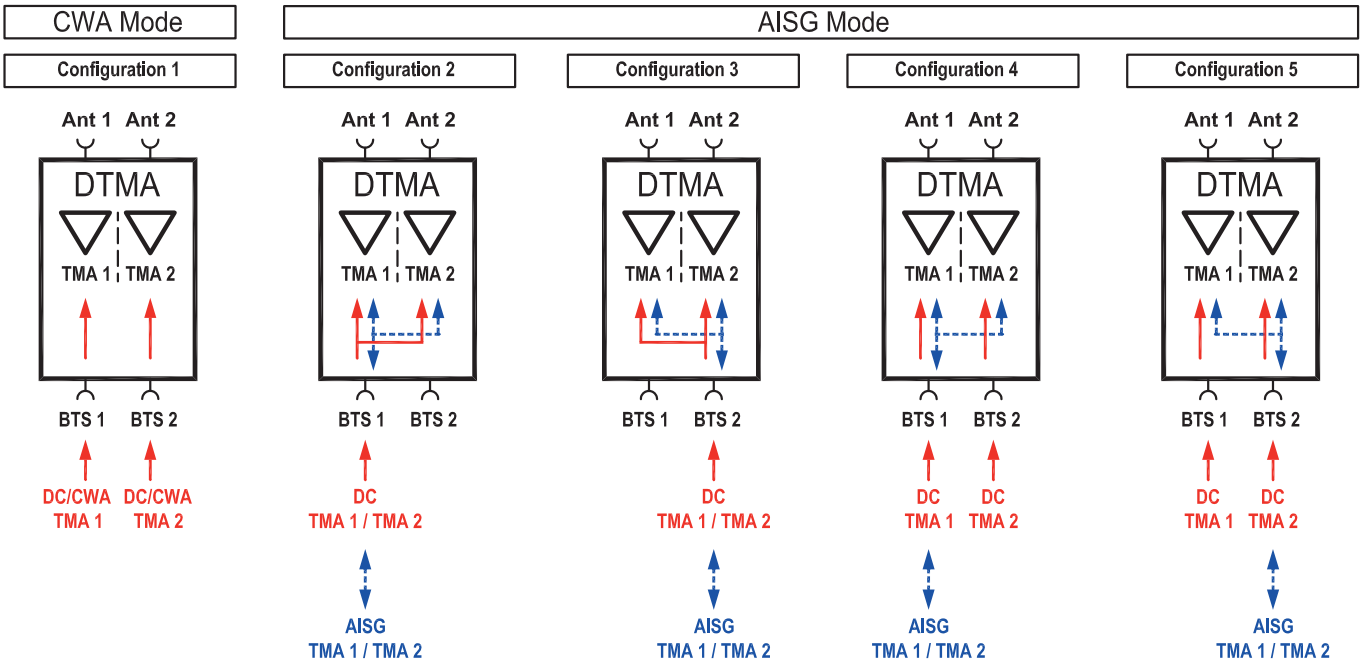
DC Supply, Current Window Alarm and AISG Configuration (automatically chosen by the DTMA depending on incoming signals)



Subject to alteration.

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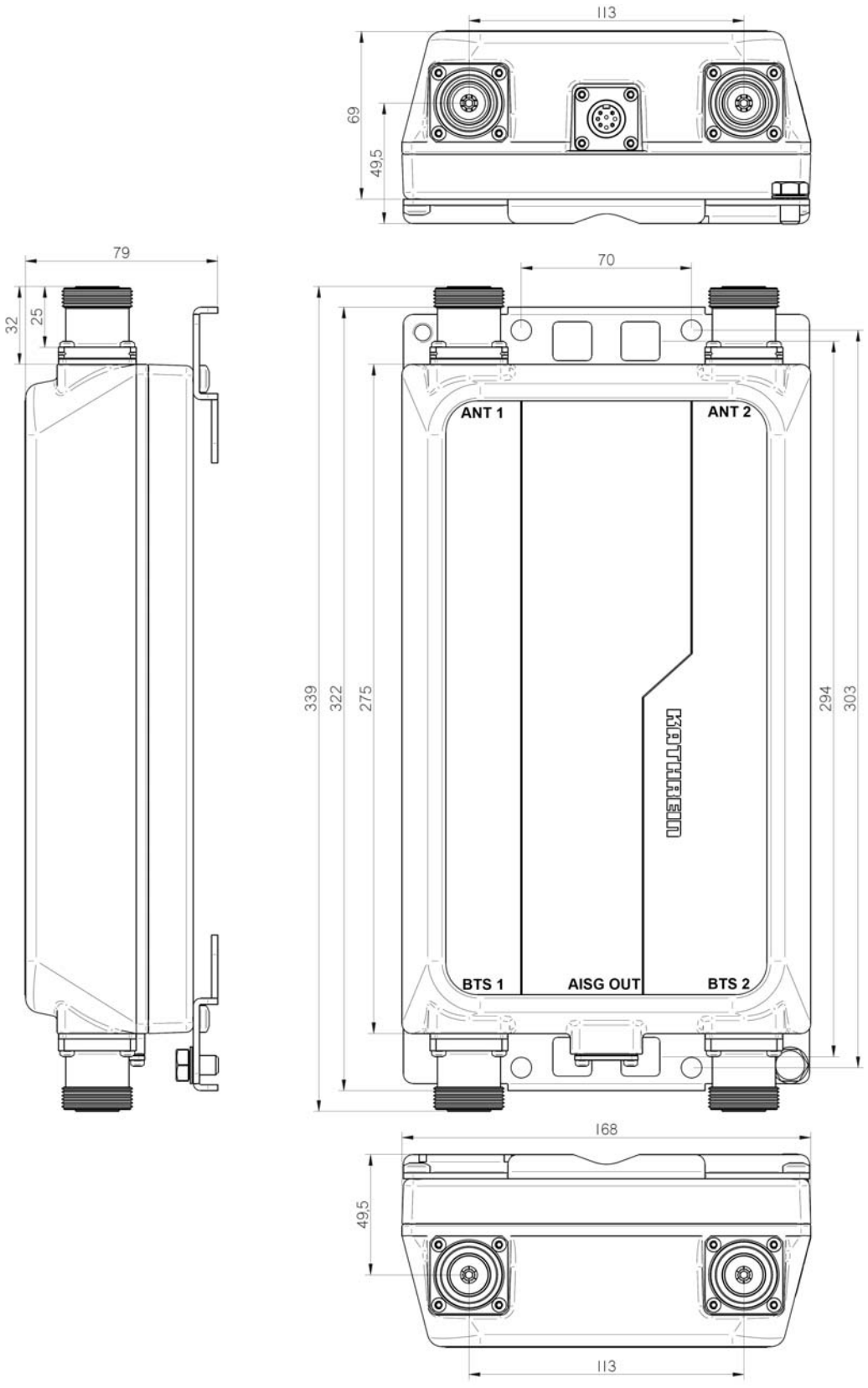

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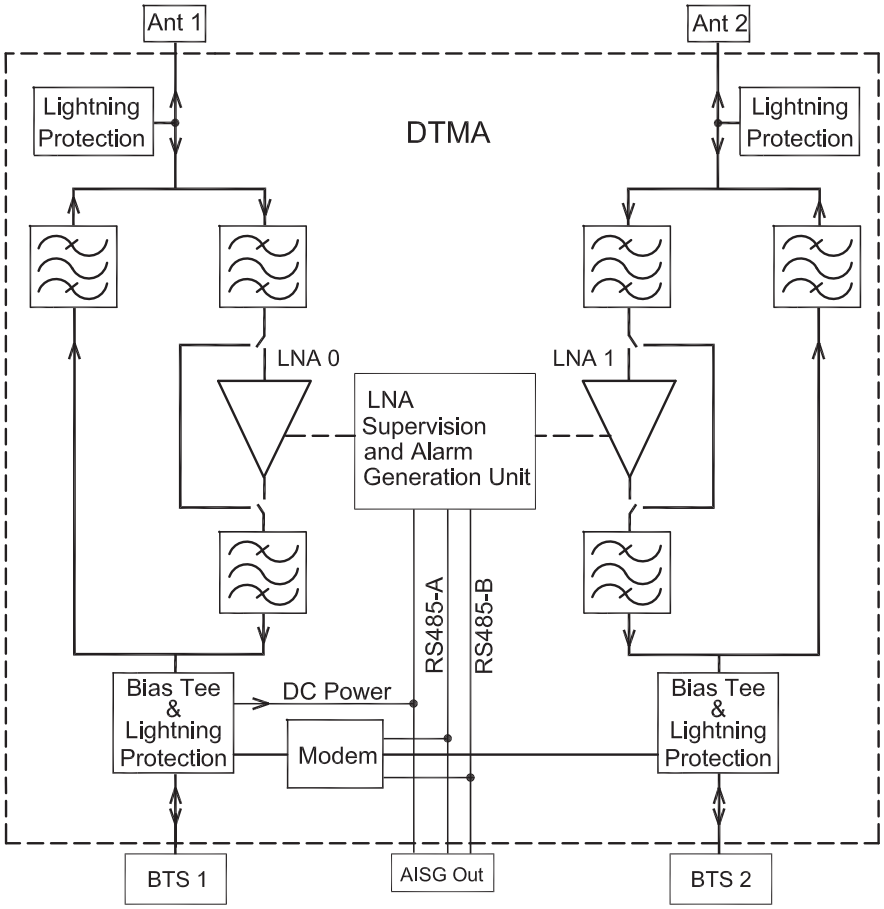

Mounting Instructions

The coupling torque at 7-16 connectors is 25 - 30 Nm! The tightning torque for f xing the AISG connector must be 0.5 – 1.0 Nm ('handtightened').

It is recommended to install the DTMA's with the antenna connectors pointing upwards and the BTS connectors pointing downwards.

In case of DTMA's with RET-connectors (Remote Electrical Tilt-connectors according to AISG Standard) it is **recommended** to mount the DTMA's in such a way that the RET-connector **always points downwards**! A downward slanted mounting position between the vertical and horizontal plane is also allowed.

AISG Setting

The protocol of the software interface can be switched between AISG 2.0 / 3GPP and AISG 1.1 and vice versa with a vendor specif c command (depending on default setting). If the primary station does not support the default setting, it has to be switched over before system start-up. Please contact Kathrein for further information.

Please note

The DTMA is not designed for permanent operation under water. Test conditions for the IP67 rating: submerge depth 1 m, submerge time 1 hour.

As a result of more stringent legal regulations and judgements regarding product liability, we are obliged to point out certain risks that may arise when products are used under extraordinary operating conditions.

Extraordinary operating conditions, such as heavy icing or exceptional dynamic stress (e.g. strain caused by oscillating support structures), may result in the breakage of a mast mounted device or even cause it to fall to the ground.

KATHREIN tower mounted amplif ers are designed to operate under the environmental conditions as described in
ETS 300 019-1-4 class 4.1E and have passed environmental tests as specif ed in ETS 300 019-2-4. The homogenous design of KATHREIN's tower mounted amplif ers use identical modules and materials. Extensive tests have been performed on typical samples and models.

The installation team must be properly qualif ed and also be familiar with the relevant national safety regulations.

The details given on our data sheets have to be followed carefully when installing the antennas, f lters, combiners, amplif ers and accessories.

The limits for the coupling torque of RF connectors, recommended by the connector manufacturers must be obeyed.

Any previous datasheet issues have now become invalid.

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All specifications are subject to change without notice.
The latest specifications are available at www.kathreinusa.com

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