

Kathrein's 86010149 integrable Remote Control Unit (iRCU) allow operators to control the electrical tilt of compatible antennas without direct access to the antenna.

- Compliant to AISG 1.1 and 3GPP/AISG 2.0
- Field replaceable without dismantling the antenna
- Daisy Chain feasibility
- Allow control of the antenna either locally through a laptop computer, on site desktop computer, the optional central control unit; remotely via an ethernet network or over the internet



Type No.	86010149
Protocols	Compliant to AISG 1.1 and 3GPP/AISG 2.0
Logical interface ex factory <sup>1)</sup>	AISG 2.0/3GPP
Input voltage range	10 ... 30 V (pin 1, pin 6)
Power consumption	< 1 W (stand by); < 10 W (motor activated)
Connectors <sup>2)</sup>	2 x 8 pin connector according to IEC 60130-9; according to AISG Daisy chain in: male; Daisy chain out: female
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 1, pin 6); DC return (pin 7); according to AISG / 3GPP
Adjustment time (full range)	40 sec (typically, depending on antenna type)
Adjustment cycles	> 50,000
Temperature range	-40 °C ... +60 °C
Protection class	IP 24
Lightning protection	AISG interface (each pin); 2.5 kA (10/350µs); 8 kA (8/20µs)
Weight	480 g (1.1 lbs)
Packing size	245 x 93 x 102 mm, (9.6 x 3.6 x 4 inches)
Dimensions (H x W x D)	170 x 68.5 x 66 mm, (6.68 x 2.7 x 2.6 inches)

<sup>1)</sup> The protocol of the logical interface can be switched from 3GPP/AISG 2.0 to AISG 1.1 and vice versa with a vendor specific command.

**Please note:**

If the Primary of the RET system doesn't support the standard of the 'logical interface ex factory', the iRCU must be switched to the appropriate standard of the Primary before installation. Please contact Kathrein for further information.

<sup>2)</sup> The tightening torque for fixing the connector must be 0.5 – 1.0 Nm ('hand-tightened'). The connector should be tightened by hand only!

- Standards
- EN 60950-1 (Safety)
  - EN 55022 (Emission)
  - EN 55024 (Immunity)
  - ETS 300019-1-4 (Environmental)

Certification: CE, FCC15.107 class B

Scope of supply: Integrable Remote Control Unit



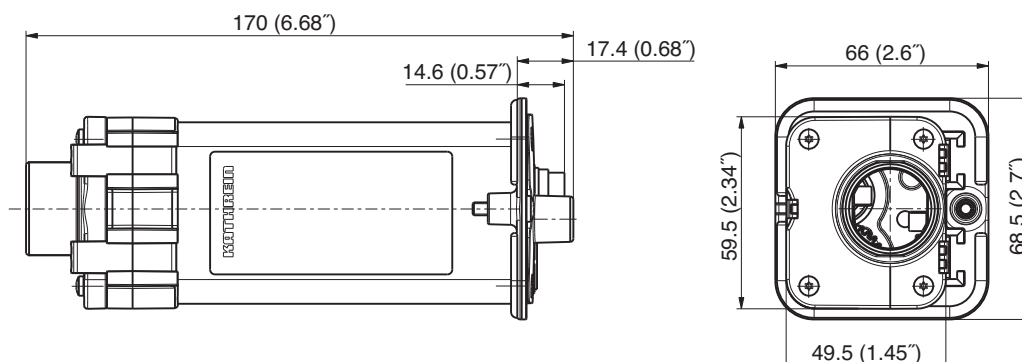
Daisy chain in (male)      Daisy chain out (female)



Retaining Screw Torx 20

Bottom view of RCU

936.4054/b Subject to alteration.



All specifications are subject to change without notice.  
The latest specifications are available at [www.kathreinusa.com](http://www.kathreinusa.com)

**Please note:** Additional grounding of the iRCU is not required if the iRCU is fixed to an antenna with proper grounding. Please assure that grounding of the antenna has been carried out according to all relevant local regulations.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

**Please note:** 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.

The mechanical design is based on the environmental conditions as stipulated in ETS 300 019-1-4 and thereby respects the static mechanical load imposed on an antenna by wind at maximum velocity. Wind loads are calculated according to DIN 1055-4. 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 an antenna or even cause it to fall to the ground. These facts must be considered during the site planning process.



**The installation team must be properly qualified and also be familiar with the relevant national safety regulations. The details given in our data sheets have to be followed carefully when installing the antennas 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.**