65°

698–894 MHz
1710–2170 MHz

XX - POL

Adjustable Electrical Downtilt
0°–16°, 0°–10°
Internal Remote Control

Profile PA4

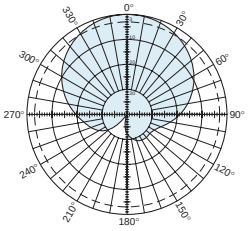
General specifications:

Frequency range	698–894 MHz // 1710–2170 MHz
Impedance	50 ohms
VSWR	<1.5:1
Intermodulation (2x20w)	IM3:< -150 dBc
Polarization	+45° and -45°
Connector	4 x 7-16 DIN female (long neck)
Isolation	intrasystem >30 dB // intersystem >35 dB

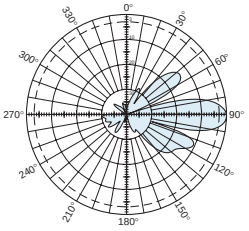
IRT specifications:

Logical interface ex factory[1)]	AISG 1.1
Protocols	AISG 1.1 and 3GPP/AISG 2.0 compliant
Hardware interface[2)]	2 x 8pin connector acc. IEC 60130-9; according to AISG: – RCUin (male): Control / Daisy chain in – RCUout (female): Daisy chain out
Power supply	10–30 V
Power Consumption	<1 W (standby); <8.5 W (motor activated)
Adjustment time (full range)	40 seconds
Adjustment cycles	>50,000
Certification	FCC 15.107 Class B Computing Devices

698–894 MHz

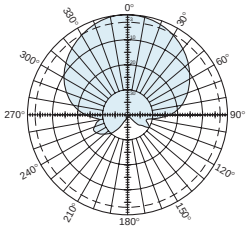


Horizontal pattern
±45°- polarization

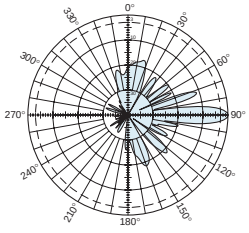


Vertical pattern
±45°- polarization
0°–16° electrical downtilt

1710–2170 MHz



Horizontal pattern
±45°- polarization



Vertical pattern
±45°- polarization
0°–10° electrical downtilt

Specifications:	**698–806 MHz**	**824–894 MHz**	**1710–1755 MHz**	**1850–1990 MHz**	**2110–2170 MHz**
Gain	14.3 dBi	14.8 dBi	17.3 dBi	17.5 dBi	17.3 dBi
Front-to-back ratio	>30 dB (co-polar) 32 dB (average)	>27 dB (co-polar) 30 dB (average)	>30 dB (co-polar) 34 dB (average)	>30 dB (co-polar) 34 dB (average)	>30 dB (co-polar) 34 dB (average)
Maximum input power per input	500 watts (at 50°C)	500 watts (at 50°C)	300 watts (at 50°C)	300 watts (at 50°C)	300 watts (at 50°C)
+45° and -45° polarization horizontal beamwidth	68° (half-power)	65° (half-power)	61° (half-power)	60° (half-power)	61° (half-power)
+45° and -45° polarization vertical beamwidth	15° (half-power)	13.5° (half-power)	7.5° (half-power)	7.5° (half-power)	7.5° (half-power)
Electrical downtilt continuously adjustable	0°–16°	0°–16°	0°–10°	0°–10°	0°–10°
Min sidelobe suppression for first sidelobe above main beam average	0° 8° 16° T 17 16 16 dB 19 19 18 dB	0° 8° 16° T 18 16 16 dB 22 20 20 dB	0° 5° 10° T 18 18 17 dB 20 20 20 dB	0° 5° 10° T 18 18 17 dB 20 20 20 dB	0° 5° 10° T 18 18 17 dB 20 20 20 dB
Cross polar ratio Main direction 0° Sector ±60°	25 dB (typical) >10 dB, 15 dB (avg)	25 dB (typical) >8 dB, 14 dB (avg)	25 dB (typical) >8 dB, 14 dB (avg)	25 dB (typical) >10 dB, 16 dB (avg)	25 dB (typical) >8 dB, 14 dB (avg)
Tracking	1.5 db	1.5 db	2.0 db	1.0 db	2.0 db
Squint	±2.5°	±4°	±4°	±1.5°	±4°

[1)] The protocol of the logical interface can be switched from AISG 1.1 to 3GPP/AISG 2.0 and vice versa with a vendor specific command. Start-up operation of the RCU 86010149 is possible in an RET system supporting AISG 1.1 or supporting 3GPP/AISG 2.0 after performing a layer 2 reset before address assignment. The protocol can also be changed as follows: AISG 1.1 to 3GPP: Enter "3GPP" into the additional data filed "Installer's ID" and perform a layer 7 reset or a power reset. 3GPP to AISG 1.1: Enter "AISG 1" into the additional datafield "Installer's ID" and perform a layer 2 reset or a power reset. After switching the protocol any other information can be entered into the "Installer's ID" field.

[2)] The tightning torque for fixing the connector must be 0.5 – 1.0 Nm ('hand-tightened'). The connector should be tightened by hand only!

AISG
Antenna Interface Standards Group