



Antennas

DATA SHEET

Internal Remote Electrical Tilt (iRET)

RET-T17iG3-S

- Eliminates external AISG cables between RET's
- AISG 2.0/3GPP Protocol
- AISG 3.0 upgradable when available
- RS-485 Interface
- Software upgradeable

Overview

The Internal Remote Electrical Tilt (iRET) actuator is part of Communication Component Inc.'s complete iRET System. The iRET actuator enables optimization on a continuous basis of the sector coverage pattern. It provides an RS485 control interface which is AISG 2.0 compatible. The iRET actuator, when used with a Site Control Unit (SCU) or an AISG Compliant BTS enables remote fine tuning of the Site footprint without requiring a tower climb. The continuous adjustment capability allows changes to the antenna downtilt pattern to suit network optimization, changing traffic patterns or seasonal changes such as foliage absorption.

The Internal Remote Electrical Tilt (iRET) actuator from CCI consists of an RS485 control interface driving a DC motor with an encoder, which connects to the existing antenna phase shifter that controls downtilt of the antenna pattern. CCI's iRET activator connects internally to an AISG bus within the antenna, this eliminates all external AISG cable interconnects and improves reliability. The Internal Remote Electrical Tilt actuator is designed for outdoor environments and operates between +10 to +30V DC. CCI RET's are designed and produced to ISO 9001 certification standards for reliability and quality in our state-of-the-art manufacturing facilities.



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SPECIFICATIONS

Internal Remote Electrical Tilt (iRET)

RET-T17iG3-S

General Specifications

Part Number	RET-T17iG3-S
Protocols	AISG 2.0
RET Type	Type 1
Adjustment Cycles	>10,000 cycles
Tilt Accuracy	$\pm 0.1^\circ$
Temperature Range	-40° C to 70° C

Electrical

Data Interface Signal	DC
Input Voltage	10-30 Vdc
Current Consumption Tilt	100 mA at $V_{in}=24$ (500 mA MAX)
Current Consumption Idle	10 mA at $V_{in}=24$



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STANDARDS & CERTIFICATIONS

Internal Remote Electrical Tilt (iRET)

RET-T17iG3-S

Certifications

Safety	EN 60950-1, UL 60950-1
Emission	EN 55022
Immunity	EN 55024
Environmental	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-5, IEC 60068-2-6, IEC-60068-2-11, IEC 60068-2-14, IEC 60068-2-18, IEC 60068-2-27, IEC 60068-2-29, IEC 60068-02-30, IEC 60068-2-52, IEC 60068-2-64, GR-63-CORE 4.3.1, EN 60529, IP 24

Antenna Interface Standards Group (AISG), Federal Communication Commission (FCC) Part 15 Class B, CE, CSA US

