IDCRAFT
RFID & NFC EXPERTS

UHF | RAIN - Panel Antenna
CT - panAx6CS



- 6 dBic gain, circular polarization
- Compact 128 × 128 × 20 mm, 0.3 kg
- Wideband 840–960 MHz, 90° beamwidth
- Side SMA connector for flat mounting
- IP67 housing, −40 to +85 °C

UHF | RAIN - Panel Antenna
Compact side-fed antenna for flat installation

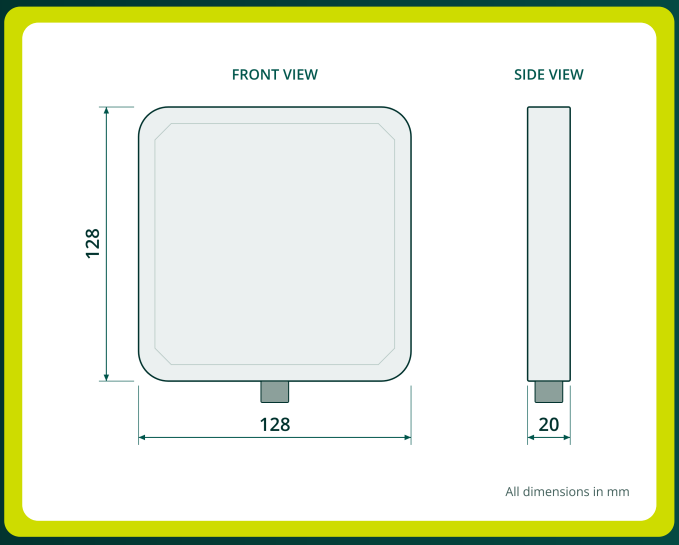
The CT panAx6CS is a compact, circularly polarized UHF | RAIN RFID far-field panel antenna with side feed. On a 128 × 128 mm footprint and only 20 mm depth it provides more than 6 dBic gain with a 90° half-power beamwidth in both planes – a wide read zone at short to medium range where larger panels do not fit. It weighs 0.3 kg without bracket.

Circular polarization keeps tag detection largely independent of how a tag is rotated in front of the antenna. The wideband design covers 840–960 MHz, so one version serves the EU, US and other regional UHF bands, with VSWR ≤ 1.3:1 and 50 ± 1 Ω impedance for any UHF | RAIN RFID reader (ISO/IEC 18000-63, EPC Gen2). The RF feed is an SMA female connector on the side of the housing, so no clearance is needed behind the antenna.

A double seal of gasket and silicone and a rib-reinforced housing of ASA and aluminium protect the antenna in harsh indoor and outdoor environments (IP67, −40 to +85 °C, 5–95 % RH); it is not intended for acidic or alkaline atmospheres. Four M6 threaded holes on the rear take an optional L-bracket for mounting on steel frames or poles. A version with rear connector is available as CT panAx6C.

Common Applications

- Access Control
- Retail
- Smart Shelves
- Smart Cabinets
- Production Stations
- Warehouse Management



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TECHNICAL SPECIFICATIONS

RF Characteristics

Antenna Type	Far-field panel antenna, side feed
Frequency Range	840–960 MHz
Gain	> 6 dBic
Polarization	Circular
Beamwidth H / E	90° / 90°
VSWR	≤ 1.3:1
Impedance	50 ± 1 Ω
Connector	SMA female, side

Part No. / Model

panAx6CS-WB	840–960 MHz, all regions

Physical Characteristics

Dimensions	128 × 128 × 20 mm
Weight	0.3 kg (without bracket)
Housing	ASA engineering plastic, aluminium
Colour	Milk white
Mounting	4 × M6 threaded holes, 36.2 mm square

Environmental

Protection Class	IP67
Operating Temperature	−40 to +85 °C
Storage Temperature	−40 to +85 °C
Relative Humidity	5–95 %