

# EkkoCT

## Wireless AC Current Sensor



- ⚙️ **Manufacturer-agnostic wireless sensor**
- ⚙️ **Non-invasive installation**
- ⚙️ **Low cost**
- ⚙️ **Secure wireless connectivity with 128-bit AES encryption and physical airgaps**

EkkoCT uses retrofit current transformers clipped round the relevant conductors and combines this data with a representative voltage and power factor to measure power. This simplified approach is ideal for applications where power consumption trends are more important than absolute power measurement.

EkkoCT can be powered by its internal battery, avoiding the need for any electrical connection to your infrastructure. Combined with the independence from existing monitoring this provides a fully airgapped separation between your infrastructure and EkkoSoft.

EkkoCT can be combined with an adapter module to allow the use of Rogowski coils in place of current transformers. These are ideal for higher current circuits or where the space around the conductors is too limited for current transformers to fit.

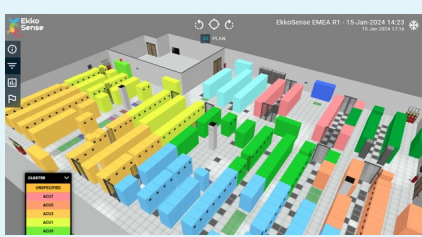
EkkoCT transmits measured data at intervals between 30 seconds and 10 minutes. Data can either be transmitted as instantaneous values, or as the average from multiple measurements spaced evenly throughout the transmit interval. Averaging data over multiple measurements ensures that any changes to measured values between transmissions are captured. EkkoCT is housed in a standard DIN rail mount enclosure and can be powered by an internal battery or from an external 12-24V AC or DC supply.

### ⚙️ EkkoCT enables...



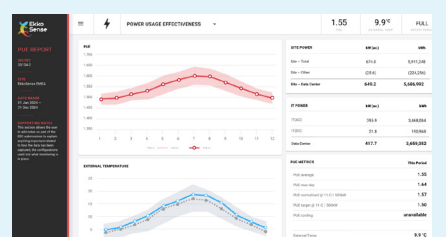
#### Fine grain temporary power monitoring for DCOP

As part of a pre-packaged kit EkkoCT provides a convenient way to monitor power changes without integration to existing on site meters.



#### 3D Data Center Visualization

Thanks to EkkoCT data, operations teams get to see all their cooling, power and thermal conditions presented via intuitive 3D visualizations



#### ESG Reporting

EkkoSoft Critical's granular accuracy allows access to key ESG Reporting metrics including PUE, CUE, WUE and CER for CSRD and EED.

Images show actual software footage



## Simplify power usage comparisons with DCOP EkkoCT.



The DCOP EkkoCT kit supports the EkkoSense Data Center Optimization Process (DCOP) by making it easier to demonstrate before and after energy savings. DCOP EkkoCT is deployed temporarily before the DCOP process begins, and provides a clear benchmark against which EkkoSense DCOP energy savings can be demonstrated.

DCOP EkkoCT takes advantage of our existing EkkoCT Wireless Current Measurement Sensor, and – once permission has been obtained - provides a temporary solution in order to measure the current flowing in a monitored circuit. The kit combines EkkoCT with a manually inputted voltage and a power factor reading to enable circuit power to be monitored without the complexity of integrating with existing customer metering. It is also ideal for those optimization projects where existing metering cannot provide historical power data.

Our DCOP EkkoCT kit is designed to be minimally invasive, using Rogowski Coil transducers that are lightweight, flexible and easy to clip around the circuit conductors of interest. Data is transmitted wirelessly to standard EkkoSense monitoring infrastructure and visualized using standard power objects in the EkkoSoft Critical software.

The EkkoCT unit and Rogowski interface are housed in a robust plastic enclosure. Cables run out to the Rogowski Coils and antenna. All cables can be extended if necessary to simplify location and installation of the main unit. The kit is powered by the standard internal battery in the EkkoCT unit inside the enclosure.

### Technical specifications (DCOP EkkoCT)

- Enclosure dimensions**  
140mm x 140mm x 79mm
- Antenna cable length**  
5m (can be extended up to 25m total)
- Rogowski coil cable length**  
2.5m (can be extended up to 5m total)
- Rogowski coil diameter**  
15cm
- Current measuring range**  
10-400A. Can be reconfigured for 20-800A

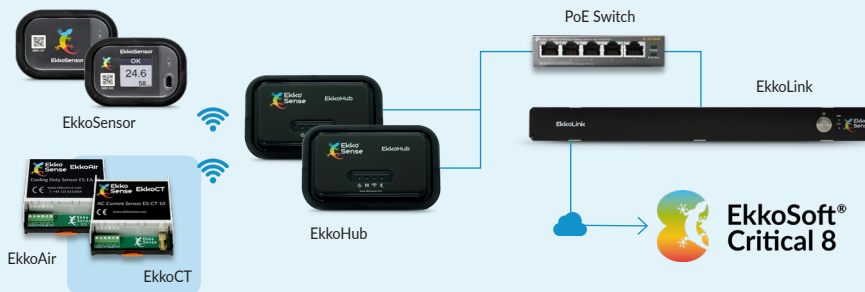
*Specifications are subject to change without notice.*

### Technical specifications (EkkoCT)

- Operating temperature range**  
0°C to 40°C (32°F to 104°F)
- Operating humidity range**  
5% to 95% RH
- Measuring temperature range (with optional external sensors)**  
0°C to 60°C (32°F to 140°F)
- Measuring humidity range (with optional external sensors)**  
0% to 100% RH
- Temperature accuracy**  
±0.2°C typical (±0.4°F)
- Relative humidity accuracy**  
±2% typical
- RF data link**  
GFSK 250bit/s 868.3MHz (ES-CT-10) or 923MHz (FS-CT-10)
- Operating range (from EkkoHub)**  
> 20m (21yds)
- Power supply**  
12V to 24V AC or DC or internal battery
- Internal battery (if not powered externally)**  
Replaceable LS14500 AA size Lithium Thionyl Chloride
- Battery life**  
> 3 years (transmitting once every two minutes an average of measurements at 30s intervals)
- Current transformer inputs**  
Compatible with 333mV output current transformers rated between 1A and 1000A
- Housing**  
ABS 70mm wide (4 DIN), 74mm high, 46mm deep (2.8"x2.9"x1.8") (53.5mm/2.1" including DIN rail)

## Standard deployment

### Position in EkkoLink architecture



- Sensors**  
30mm (1.2") diameter, 10mm (0.4") deep, supplied with 3m (118") cable
- Antenna connection**  
SMA female connector
- Sensor, power and CT connections**  
Screw terminals
- Core regulatory approvals**  
CE marked:  
Radio - EN 300 220-2 V3.1.1, FCC CFR 47 Part 15C, ISSED RSS-247  
EMC - EN 61326-2-1, EN 55032, EN 301489-3, FCC CFR 47 Parts 15.107 and 15.109  
Safety - Safety - IEC 62368



Secure 128-bit AES encryption



EkkoSoft direct mode for Edge support



Integration with existing 3rd party systems



Comprehensive integration capabilities for complete data center coverage

### Approved countries

Canada, European Union, UK, USA.

## Bring the power of EkkoSense AI to your critical facilities

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