

Application note



Subject:
**DC metering in electric vehicle
fast chargers**

Industry:
EV charging stations

Product:
DCT1

Customer:
OEMs, System integrators

CUSTOMER ISSUE

EV fast charger manufacturers need a DC meter able to correctly measure the amount of energy supplied to the battery, in order to properly bill the customer.

The AC meters upstream of the AC/DC converter provide inaccurate measurements because they also consider the losses caused by the AC/DC conversion and the losses in the cable.

OUR SOLUTION

The DCT1 is installed on the DC side and is compatible with most DC chargers on the market due to the wide voltage and current measurement range.

Thanks to the cable loss compensation function, only the energy supplied to the vehicle battery is considered, removing losses due to the cable resistance.

Data transmitted to the controller are signed to guarantee their authenticity.

BENEFITS

- Wide measuring range up to 1000 V, 300 or 600 A
- Cable loss compensation
- Signed data transmission (256 bit or 384 bit)