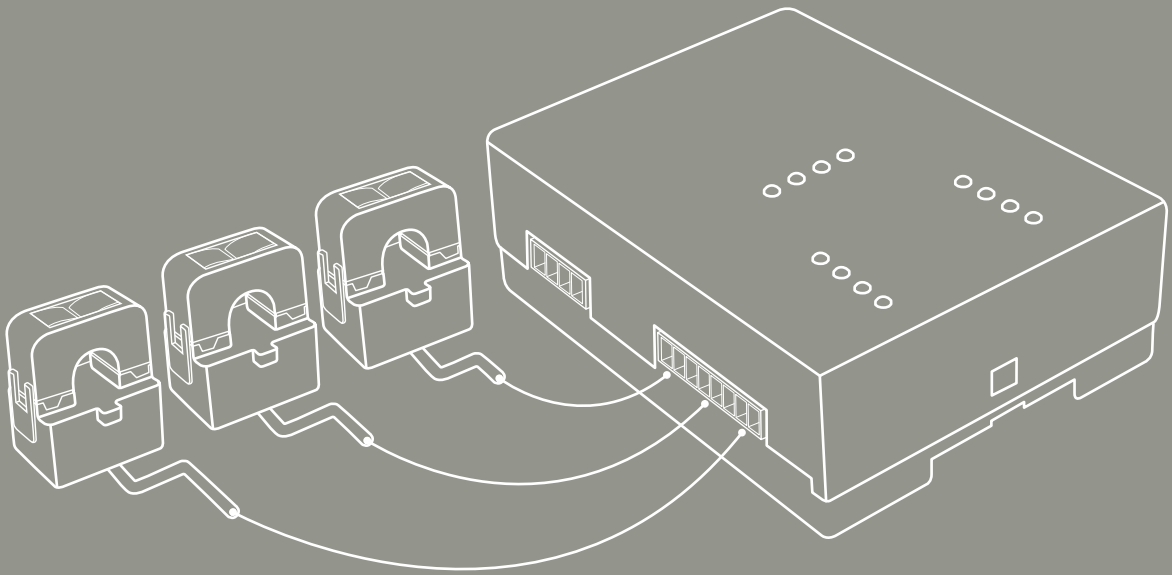


# ESTI-meter



**ESTI-meter is the new revolutionary sub-metering device from t-mac. A self-contained unit complete with split-core CTs, the device can be installed on sub-metering points throughout your building without the need for an electrician. Connecting to your t-mac device, corporate Ethernet or GPRS network the ESTI-meter uploads real time metering data to t-mac's online energy analysis software. A single ESTI-meter device can monitor up to 8x sub-metering points and can connect to 2x pulse outputs from mains metering e.g. gas, water or electricity. Running in parallel to your mains AMR, the ESTI-meter is a quick and cost-effective solution to identifying 'where' in your building you are using energy and 'why'.**

## CT Interface

ESTI-meter utilises Split Core current transducers, which are accurate, compact and easy to install.

The sub-meter provides Current (A), energy (kWh) and power (kW) for each of the monitored circuits.

Each CT Interface has its own LED, which flashes 1000 times for every kWh the circuit has consumed. The Voltage and PF of the monitored circuit can be configured, which helps improve the overall accuracy of the meter's estimated readings.

## Pulse Inputs

The ESTI-meter is equipped with two digital pulse inputs for metering of electricity, gas (note 1) or water meters with a volt free output.

Note 1: An isolation device, such as a Chatterbox (001-1125) will be required for connection between the ESTI-meter and a gas meter.

ESTI-meter is packaged within an easy to install DIN-rail mountable enclosure.  
(Optional Wall mounting brackets can be purchased separately)

## Communications

There are three versions of the ESTI-meter, one which communicates via a host controller, one which communicates via the corporate LAN, and one which communicates via the GPRS network.

**ESTI-meter:** is connected via the Modbus RTU protocol to a host controller such as the t-mac device. Polled at regular intervals, a single or multiple ESTI-meter(s) transmits real-time energy data to the host controller for analysis.

**ESTI-meter Ethernet:** transmitting real-time energy data via an ethernet connection, to the t-mac servers without the need for a separate communication device.

**ESTI-meter GPRS:** transmits real-time energy data to the t-mac servers via a GPRS SIM card, without the need for a separate communication device.

## Energy Analysis Software

Once the data is received by the t-mac servers from single or multiple ESTI-meter(s), users view the real-time energy data via t-mac's powerful online Energy Analysis Software ([www.energy-analysis.co.uk](http://www.energy-analysis.co.uk)) to view, analyse, quantify and report on energy consumption, cost and carbon.

## Application

Ideal for commercial, industrial and residential metering applications.

## Installation

Always power down a circuit before installing the ESTI-meter then simply connect the split-core CTs to the mains cables in your building. Please note, an electrician may be required if there are no insulated hanging tails, or if an electrical cabinet requires opening.

## Specifications

### Operating Supply

**Voltage** 10-30VDC

**Current** 250mA typical at 24VDC (Ethernet version)

### CT Interface

**Quantity** Up to 8

**Current Range** 0...100A

**Current Accuracy** 0.1% over full range

### Digital Pulse Inputs

**Quantity** 2

**Wetting Voltage** 5V DC (+ Terminal)

### Enclosure

**Dimensions** 105x86x50mm

**Material Body** Powder coated steel (lid) / Phenylene oxide (Base)



Terminals	
<b>Wire Diameter</b>	Max 16 AWG, 1.5mm <sup>2</sup> cables.
<b>USB (Type B)</b>	For CT setup and commissioning
<b>Serial Communication</b>	RS-485 Modbus RTU (ESTI-meter only)
<b>Ethernet</b>	10/100 Base.T. (ESTI-meter ethernet only)
<b>GPRS Antenna</b>	SMA (ESTI-meter GPRS only)

Environmental	
<b>Protection</b>	IP10
<b>Operating Temp</b>	0...40°C
<b>Storage Temp</b>	-10...50°C
<b>Humidity</b>	0 to 90% RH non-condensing

Ordering Information			
Number of CTs	ESTI-meter	ESTI-meter Ethernet	ESTI-meter GPRS
<b>3</b>	001-1184	001-1187	001-1214
<b>6</b>	001-1185	001-1188	001-1215
<b>8</b>	001-1186	001-1189	001-1216
<b>Wall mounting brackets</b>	500-52556	500-52556	500-52556
<b>Hosting</b>	-	001-0951	001-0951
<b>SIM card</b>	-	-	500-51759
<b>DIN rail mounted PSU (24VDC)</b>	001-1190	001-1190	001-1190
<b>Plug top PSU (24VDC)</b>	001-1231	001-1231	001-1231

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