

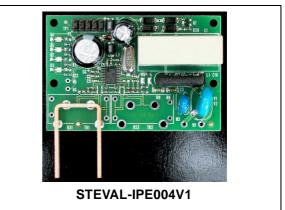
# STEVAL-IPE004V1

Electricity Meter (mono phase) - Measurement Board 1 Shunt

Data Brief

#### Features

- Single-phase, 0.5 class accuracy guaranteed
- U<sub>NOM</sub>(RMS) = 140 to 300V, I<sub>NOM</sub>/I<sub>MAX</sub>(RMS) = 2/20A, f<sub>LIN</sub> = 45 to 65Hz, T<sub>AMB</sub> = -40 to +85 °C
- LED checking for:
  - Functioning
  - No Load Condition
  - Reverse Energy Direction
- Stepper Motor Display Connector
- Capacitive Power Supply
- SPI Interface Connector:
  - Active, Reactive Apparent Power consumption
  - $\,$  V\_{RMS}, I\_{RMS} and Line Frequency
  - Status



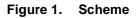
#### Applications

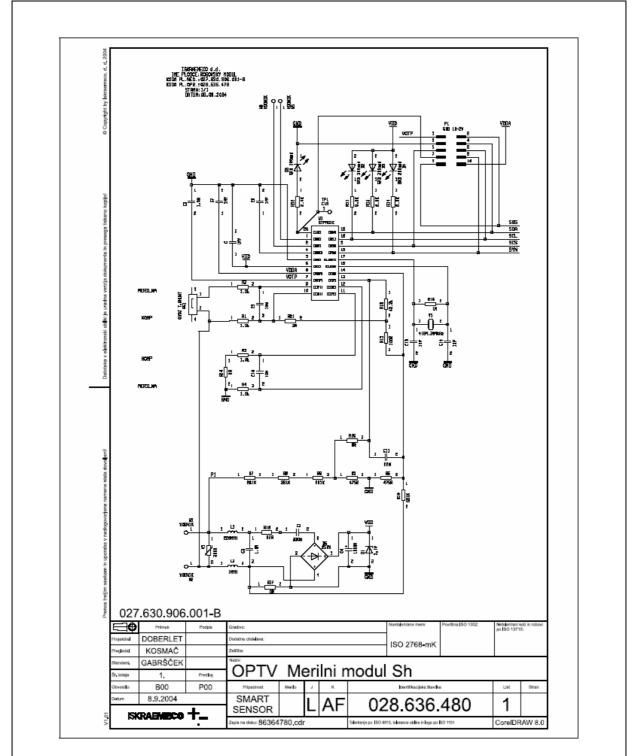
This metering module can be used to build a Class 0.5 Single-phase standalone or microprocessor based meter with or without Tamper detection for power line systems of  $U_{NOM} = 140$  to  $300V_{RMS}$ ,  $I_{NOM}/I_{MAX} = 2/20A_{RMS}$ ,  $f_{LIN} = 45$  to 65Hz and  $T_{AMB} = -40$  to +85 °C.

In standalone mode, a stepper motor display should be connected to pins W5 and W6. A user can select the type of stepper or the constant of output pulse frequency by changing LVS or KMOT configurators respectively.

In Microprocessor based mode, a control board with a microprocessor should be connected to the male connector P1 of the module using a 10-wire flat cable.

### **1** Board Schematic





## 2 Revision history

Date	Revision	Changes
12-Jan-2006	1	Initial release.



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