# multitek



#### **PARAMETERS MEASURED**

\* dc Voltage (V) \* dc Current (I) \* dc Power (kW) \* dc Import Energy (kW.h) \* dc Export Energy (kW.h) \* dc Ampere Hours (A.h) \* dc Amp Demand (Ad) \* dc Max Amp Demand \* dc Power Demand (kWd) \* dc Max Power Demand \* dc Export Power Demand (kWd) \* dc Max Export Power Demand (kWd) \* Hours Run

# ORDERING INFORMATION

Information requiredExampleProduct CodeM553-CTXDCNominal input current50mVNominal voltage800V

Standard nominal inputs: Voltage 60V, 150V, 300V, 800V Current (using external shunt) 50mV, 60mV, 75mV, 100mV

#### PowerCom M553-CTXDC

The M553-CTXDC PowerCom is a multifunction dc power transducer, providing RS485 Modbus communication and a pulsed output in a 55mm Din enclosure.

The M553-CTXDC has a universal power supply which is suitable for ac or dc auxiliary voltages. The M553-CTXDC covers a wide range of voltage inputs and Current inputs. The current input can be Up to 5 amps direct or any value using a mV input

Example: a shunt of 2000A dc with 50mV output.

#### **COMMUNICATION**

The M553-CTX uses the well established Modbus protocol. This enables remote reading and programming of the M553-CTX using a host computer.

The RS485 network allows up to 32 units to be connected in parallel, enabling them to be used with PC, PLC, RTU, Data loggers and Scada programs.

The PowerCom's communication port incorporates an auto-configure function which, when connected to an existing Modbus network, will automatically detect the network's parameters.

A red LED is provided to indicate that auxiliary power is present, and that the unit is communicating correctly.

#### **PROGRAMMING**

The following can be programmed via the RS485 port: Current inputs, Demand times, relay divisor.

#### **SOFTWARE**

MultiView set-up and monitoring software is available free of charge from our web-site: www.multitek-ltd.com

#### **PULSED OUTPUT**

An optional pulsed output can be ordered. The relay can be assigned to kW.h (import/export), A.h or it can be configured to act as set-point relay in an over, under or window mode.

#### **GENERAL SPECIFICATION**

**INPUT** Rated Un **Directly connected:** 800Vdc, 300Vdc, 150Vdc or 60Vdc 2-120% Un Range 120% Un **Overload** Rated In mV dc, 1Adc or 5A dc Range 2-120% In **Overload** 120% In **Overload** 2 x In for 1 second

Specified @ 23°C 10-100% Un, 10-100% In

#### **OPTIONS**

Solid-state, low voltage relay. Rated: 100Vpk, 120mA

#### AUXILIARY

Standard: 100-440Vac/100-420Vdc **Optional:** 19-69Vdc

#### **APPLIED STANDARDS**

General Safety

**IEC 688 BSEN60688** BS4889 IEC 359 IEC 6101-1 2010

#### **APPROVALS**

UL, C-UL,

Pending

# **INSULATION**

ACCURACY

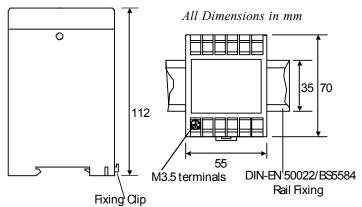
Volts and Amps

Energy

Parameters unless stated

Installation category	III
Degree of pollution	2
Rated impulse withstand ve	oltage IEC60947-1-V imp:4kV
Electrical security	IEC 61010-1
Inputs + Aux to case	3kV rms 50Hz for 1 min
Inputs + Aux to RS485	3kV rms 50Hz for 1 min
Inputs + Aux to relay	1k5V rms 50Hz for 1 min

### CASE DIMENSIONS



#### **ENVIRONMENTAL**

Working Temperature Storage Temperature **Temperature Coefficient** 

 $\theta$  to +60 deg C -30 to +65 deg C 0.01% per deg C

Class 0.3% to IEC 688

Class 0.25% to IEC 688

1% of reading to IEC 1036

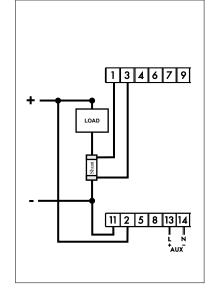
#### **CONNECTION DIAGRAM**

#### ELECTROMAGNETIC COMPATIBILITY

Immunity to : *electrostatic discharges:* radiated radio-Hz fields: electrical fast transient/bursts: IEC 61000-4-4-Level III impulse waves: conducted disturbances: voltage dips & short interruptions: IEC 61000-4-11 **Emissions to:** Conducted and radiated

## IEC 61000-4-2-Level III IEC 61000-4-3-Level III IEC 61000-4-5-Level III IEC 61000-4-6-Level III

CISPR11-Class A



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