M552 C-Tran

**AC Power Transducer and Current Transformer
for 3-Phase Systems**

NEW!

- Saves money

- No need for meters. Feeds all system electrical parameters directly to your PC

- Saves on installation time

- No separate CT wiring needed

- Standard DIN 48mm case

- Outputs to RS485 (MODBUS) protocol

- Connections are fast and easy

- All parameters viewed using Multiview software (our free software)

The new M552 C-Tran unit brings power monitoring to a whole new level!

Connect one end of the standard DIN 48mm unit to your LOAD and the other end right into your PC. Without a meter, and directly into your PC, start reading your electrical parameters!

The C-Tran unit operates with an RS485 (MODBUS) communication port. Using our free Multiview software you will begin reading:

- Phase Voltage (V)
- Line Voltage (V)
- Phase Current (I)
- Frequency (Hz)
- Active Power per phase (W)
- System Active Power (W)
- Reactive Power per phase (VAr)
- System Reactive Power (VAr)
- Import Active Energy (W.h)
- Export Active Energy (W.h)
- Import Reactive Energy (VAr.h)
- Export Reactive Energy (VA.h)

- Apparent Energy (VA.h)
- Ampere Energy (A.h)
- Power Factor per phase (P.F.)
- System Power Factor (P.F.)
- Amp Demand (Ad)
- Watt Demand (Wd)
- VA Demand (VAd)
- Maximum Amp Demand (Max Ad)
- Maximum Watt Demand Import (Max Wd)
- Maximum Watt Demand Export (Max Wd)
- Maximum VA Demand (Max VAd)
- Neutral Current

**Get one today and bring your power monitoring
to a whole new level!**

CONNECTION DIAGRAM

What's New!

PC&S
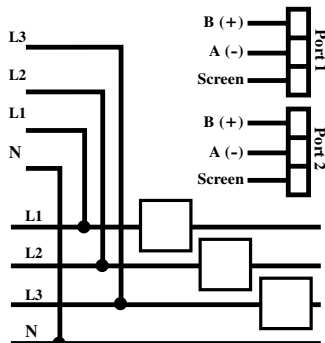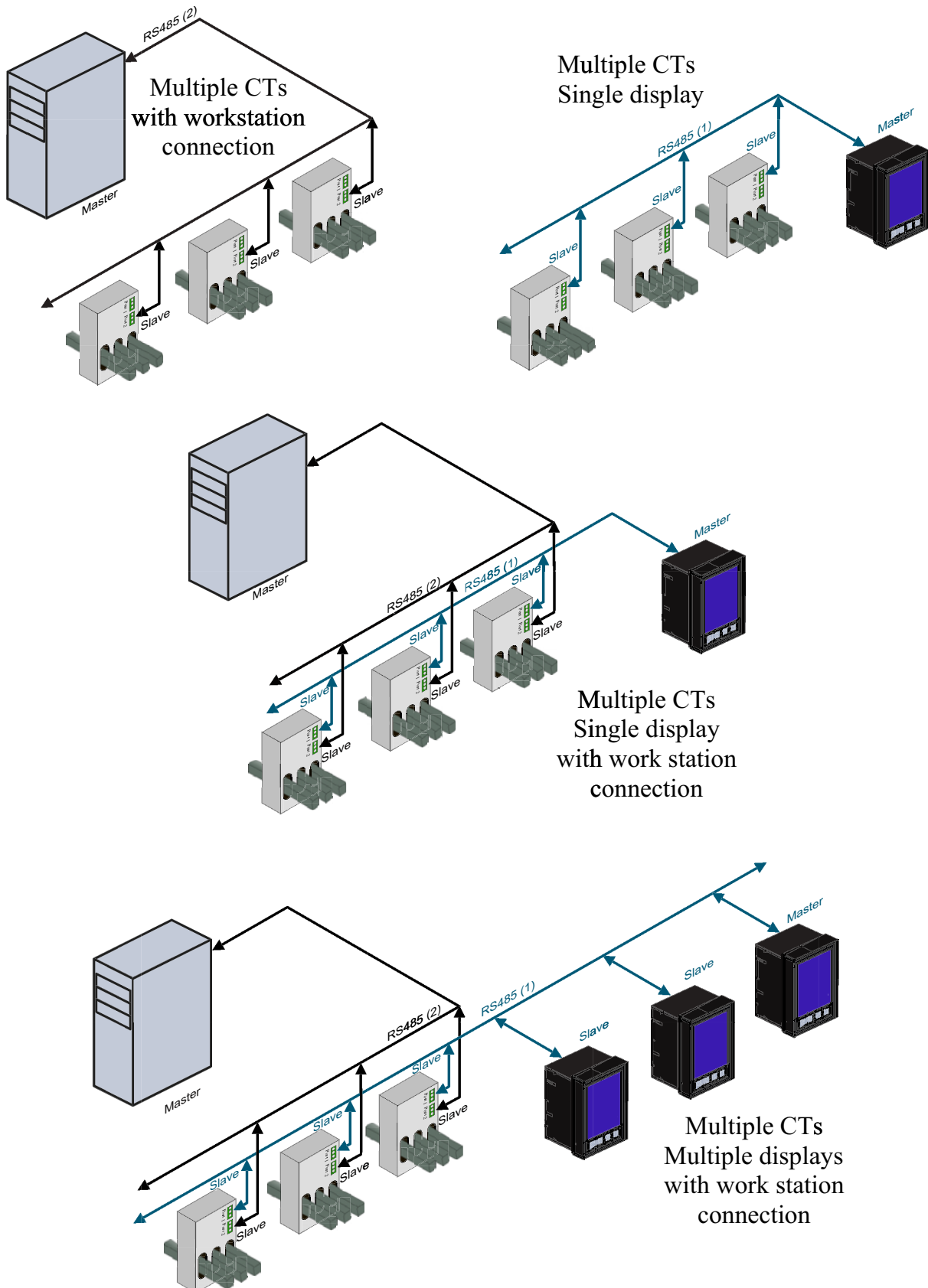
Examples of possible combinations using Ports 1 and 2

M552 C-Tran AC Power Transducer

C-TRAN

The C-Tran (M552) is a combined 3 phase multifunction AC power transducer and current transformer.
The C-Tran is fully programmable through either of its communication ports.

PARAMETERS MEASURED

* Phase Voltage (V)
* Line Voltage (V)
* Phase Current (I)
* Frequency (Hz)
* Active Power per phase (W)
* System Active Power (W)
* Reactive Power per phase (VAr)
* System Reactive Power (VAr)
* Apparent Power per phase (VA)
* System Apparent Power (VA)
* Import Active Energy (W.h)
* Export Active Energy (W.h)
* Import Reactive Energy (VAr.h)
* Export Reactive Energy (VAr.h)
* Apparent Energy (VA.h)
* Ampere Energy (A.h)
* Power Factor per phase (P.F.)
* System Power Factor (P.F.)
* Amp Demand (Ad)
* Maximum Amp Demand (Max Ad)
* Import Watt Demand (Wd)
* Maximum Watt Demand Import (Max Wd)
* Export Watt Demand (Wd)
* Maximum Watt Demand Export (Max Wd)
* VA Demand (VAd)
* Maximum VA Demand (Max VAd)
* Neutral Current
* Hours Run

ACCURACY

The accuracy of the M552 is Class 0.2 to IEC688 over the range 10% to 120% In. and for voltages from 100V to 120% of nominal.
For Active and Reactive energy the accuracy is 1% of reading to IEC 1036.
The accuracy of the current transformer is Class 0.5 for the range 10% to 120% In.

Total uncertainty of the combined C-Tran will be better than the sum of the above.

MEMORY

All data including energy registers, current and voltage ratios and calibration data is stored in a non volatile eeprom.

COMMUNICATION

Port 2 :
The main communication port.
It uses the popular Modbus protocol to retrieve measurements and to change the transducer's operating parameters. It enables the connection of a host computer, PLC, RTU, Data logger etc.

Port 1:
This port has a fixed data format. It can also retrieve measurements and set the transducer's operating parameters. Only the baud-rate and endian format can be changed on this port.
Special LCD/LED meters can be connected to this port.

PROGRAMMING

Setup and monitoring software is available from your Multitek distributor or visit the Multitek website http://www.multitek-ltd.com

ORDERING INFORMATION

Information required	Example
Product Code	M552-xxx
Nominal input current	100A

M552 C-Tran AC Power Transducer

GENERAL SPECIFICATION

INPUT

Rated Un	Directly connected voltages: (3ph4W) 100V to 330VL-N (3ph3W) 100V to 330VL-L
Range	280V nominal
Overload	Absolute maximum input: (3ph4W) 440VL-N (3ph3W) 440VL-L
Rated In	dependent on CT primary (see options)
Range	0-120% In
Burden	0.5VA per phase Volts
Overload	Absolute maximum input: 4 x In
Frequency	50/60 Hz. Nominal range 45/65Hz

OPTIONS

3 Phase Current Options:
100A, 125A, 150A, 160A, 200A, 250A

ACCURACY

Specified @ 23°C 100%-Un 10%-In

Parameters unless stated	Class 0.5% to IEC688
Frequency	Class 0.1Hz to IEC688
Power Factor	Class 1.0% to IEC 688

Active & Reactive Energy 1.0% of reading IEC1036

INSULATION

Test Voltage	4 kV RMS 50 Hz for 1 min voltage inputs to case . 3kV RS485 to case and voltage inputs. (There is no isolation between Port 1 and Port 2)
Impulse Test	EMC 5kV transient complying with IEC 801/EN 55020 HF

APPLIED STANDARDS

General	IEC 688 BSEN60688, BS4889, IEC 359
EMC	Emissions BSEN50081/1 Immunity BSEN50082/2
Safety	IEC 1010, BSEN601010

AUXILIARY

Self-powered:	maximum 440V

ENVIRONMENTAL

Working Temperature	0 to +60 deg C
Storage Temperature	-30 to +65 deg C
Temperature Coefficient	0.01% per deg C

APPROVALS

UL, C-UL	Pending

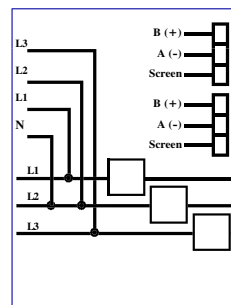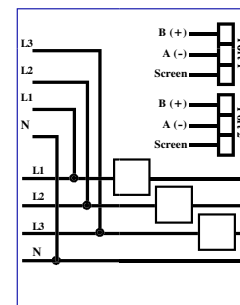## CASE DIMENSIONS
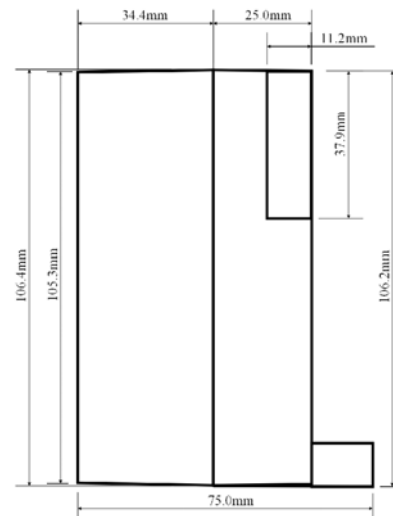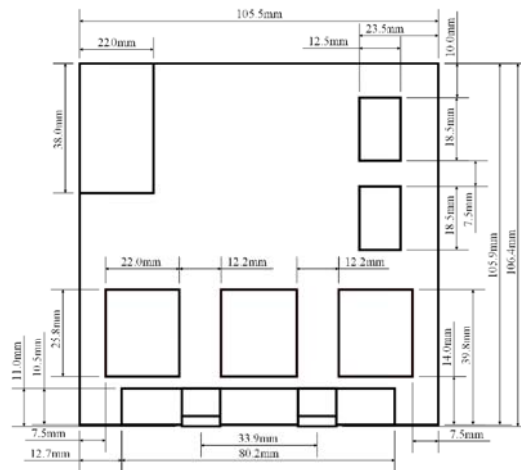
CONNECTION DIAGRAMS

**3 Phase 3 Wire
Unbalanced Load**

**3 Phase 4 Wire
Unbalanced Load**

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