

## QualiTrack I Brochure

### Single Phase Portable Energy Recorder

The QualiTrack I instrument is a single phase portable energy and quality of supply recorder designed to provide detailed information of a specific electrical feed. The USB communications interface enables fast and accurate information retrieval and the software provides a graphical interface for quick and easy analysis of recorded data.

The unit has the following main functions and features:

- Extensive single phase load profiling, recording
- Display of all instantaneous energy related values on the graphical screen
- Harmonic recording up to the 19<sup>th</sup> harmonic
- Dip recording
- Swell recording

#### QUALITRACK

- Class 1 Accuracy
- Large Onboard Memory
- Energy Parameter Display
- Keypad Programmable
- USB Port
- Cost and Energy display



#### Typical Applications

- Load Studies – Determine the capacity of a network, perform load trending and consumption calculations
- Quality of Supply Analysis (QOS) – Determine the quality of the supply voltage. Analyse detailed harmonic distortions and check for occurrence of dips and swells
- Costing Analysis – Determine cost centres, identify opportunities for demand control and determine energy consumption patterns

Measures and Records	On-board Statistical Display
Voltage between Live and Neutral	Highest and Lowest Voltage
Voltage between Neutral and Ground.	Highest current
Current ( up to 100A ac depending on CT )	Highest kVA demand.
kW, kVAr, kVA and Power factor	kWh used
Kilowatt Hours.	Cost of Kilowatt hours used since last reset

# Profile Recording

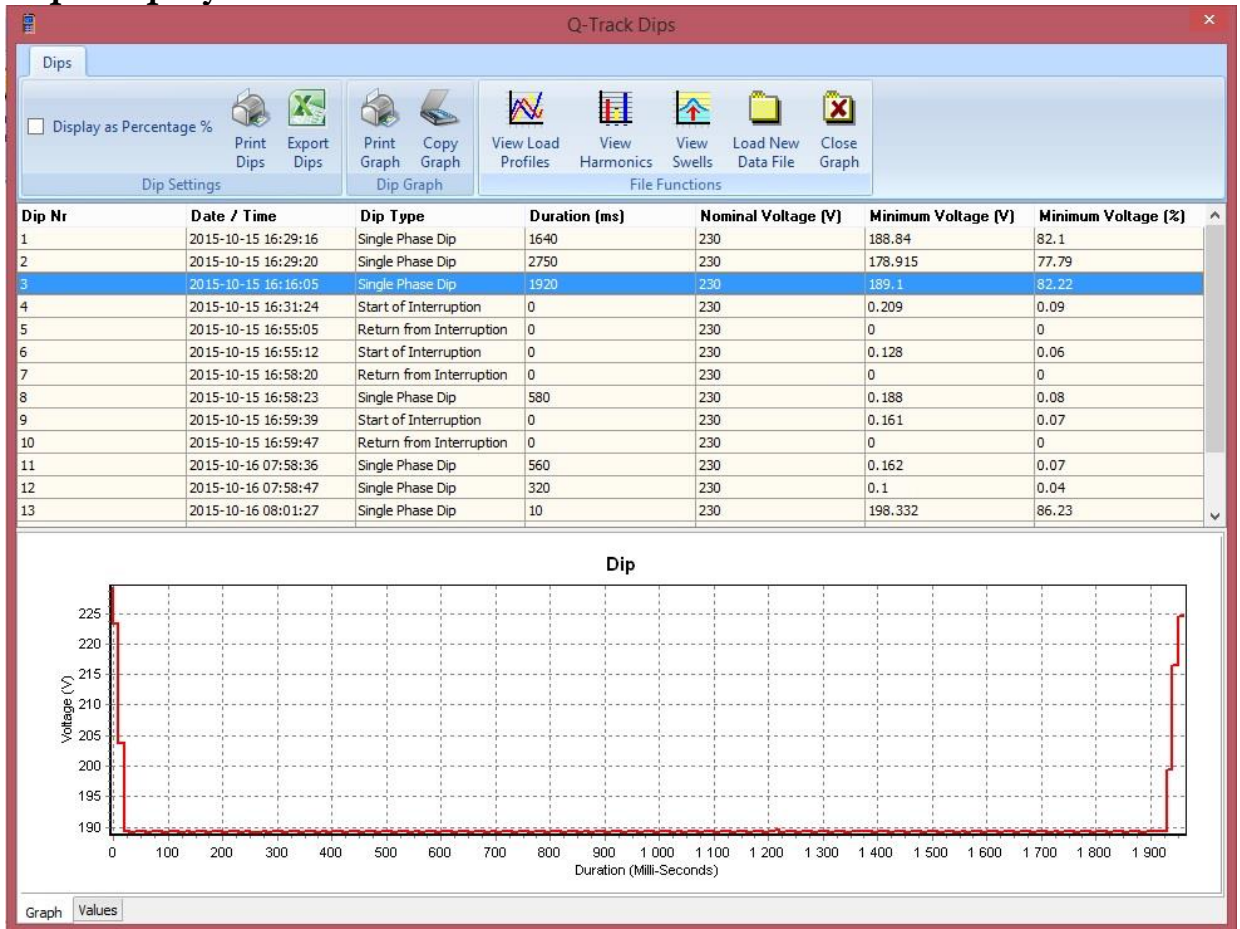
The QualiTrack is suitable for installation at any single-phase supply. The instrument records all energy parameters at preset averaging intervals ranging from 1 second to 60 minutes on a large onboard flash memory. The keypad enables the user to edit all the recording parameters as well as selecting the various viewing formats of real-time parameters on-site. The recorded data can be downloaded to any computer via the USB port. The software presents the data in various analytical formats including graphs, statistics and export functions.



## Harmonic Display:



## Dip Display:



## Voltage and Current Inputs

The QualiTrack is issued standard with a fused voltage lead with crocodile clips and 1 x 100A clamp type current transformer (CT). The instrument can therefore measure up to 100A circuits.

# Software Functionality

The QualiTrack software incorporates various graphical and analytical functions for quick and easy analysis of recorded data. Extensive zooming capabilities and multiple export functions allows for sensible and presentable reporting of recorded data.

## Instrument Statistics

Information	Parameter	Date & Time	Value	Unit
Q-Track 1 Statistics	Current Date	2015-10-08 04:29:03 PM		
Location	LocationName			
Feeder	CircuitDiscrp			
	Reset Date	2015-09-28 03:29:04 PM		
	kWh Import	R0.17	0.1	kWh
	kWh Export		0.0	kWh
	kVArh Inductive		0.1	kVArh
	kVArh Capacitive		0.0	kVArh
	Current Reset Date	2015-09-28 03:29:04 PM		
	Maximum Current (Instantaneous 20ms)	2015-09-28 04:04:55 PM	24.41	A
	Maximum Current (Average)	2015-09-28 03:30:00 PM	18.92	A
	Voltage Reset Date	2015-09-28 03:29:04 PM		
	Minimum Voltage (Instantaneous 20ms)	2015-09-28 04:04:55 PM	103.0	V
	Minimum Voltage (Average)	2015-09-28 04:13:00 PM	151.8	V
	Maximum Voltage (Instantaneous 20ms)	2015-09-28 04:04:40 PM	270.3	V
	Maximum Voltage (Average)	2015-10-07 05:20:00 AM	242.2	V
	Maximum Earth Voltage (Instantaneous 20ms)	2015-09-28 04:04:41 PM	90.66	V
	Maximum Earth Voltage (Average)	2015-10-07 05:20:00 AM	80.81	V

# Technical Information

<b>General Specifications</b>	
Dimensions	220x100x38mm
Voltage input Range	85V ac - 260V ac (Phase to Neutral)
Current Probes Supported	100A Clip-On
Communication Interface	1 x USB Port
Communication Protocol	Modbus RTU
Accuracy	Class 1
Clock Accuracy	Accurate to $\pm 1$ Minute/Year (0°C to +40°C)
Keypad	20 Key Alphanumeric
Power Consumption	2.5 VA
Expected data retention	Minimum 5 years
<b>Display</b>	
Type of Display	128 x 64 Graphical LCD with backlight & contrast control
Instantaneous Displayed Values	Line Current (Per Phase)
	Line Voltage
	kW, kVAR, kVA, Power Factor, Frequency
Measuring Method	Single Phase Only
<b>Profile Recording</b>	
Memory Capacity	4 MB
Memory Type	Non Volatile Flash
Parameters Recorded	V, I, kW, kVA, kVar and Power Factor
Recording Intervals	1, 2, 5, 10, 15, 30, 60 Second(s) or Minute(s)
Recording Method	Average over recording period
Recording Buffer	Continuous buffer (FIFO)
<b>Onboard Statistics and Month End Data</b>	
Voltage	Highest and Lowest Voltage, Highest Earth Voltage
Current	Highest Current
Energy (Meter Grand Totals)	Active Energy Import
	Active Energy Export
	Reactive Energy Capacitive
	Reactive Energy Inductive