

# Power Quality Analyzer Multifunction Electrical Tester

## **TEKON**® 550

A Power Quality Analyzer measures electrical power characteristics of devices that generate, transform or consume electricity; TEKON550 Series (A, D) are handheld instruments that accurately measure and analyze electrical parameters and incorporate cable tester functions for better convenience in use. These portable devices also allow laboratory personnel, production facility maintenance professionals and electricians to troubleshoot and benchmark power quality issues in their daily jobs.

### Features

- Measurement of power quality: Power, power factor (PF), THD (%), unbalanced rate (%)
- 1P2W, 3P3W (balance), 3P3W (imbalance/sequential measurement), 3P4W (imbalance/sequential measurement)
- Harmonic : 50th (chart/graphic)
- Measurement of voltage, current waveforms
- Measurement of inrush current
- Event analysis
- Current sensor: clamp-on sensor
- Function of cable detection (550D)
- Records and displays the quality of power



## General specifications

### Common specifications

|                    |  |
|--------------------|--|
| Dimension & weight | 100mm(W)×220mm(H)×54mm(D), Approx 800g         |
| LCD display        | 3.5" 240×160 pixels, monotype graphic          |
| Power              | 7.2V 2.5AH NiMH battery pack, DC12V/1A adaptor |
| Charge time        | 4 hours  |
| Battery life time  | 8 hours (max)                                  |
| Product safety     | CATIII 600V, EN/EC61010-1, Pollution Degree 2  |
| PC communication   | Bluetooth                                      |

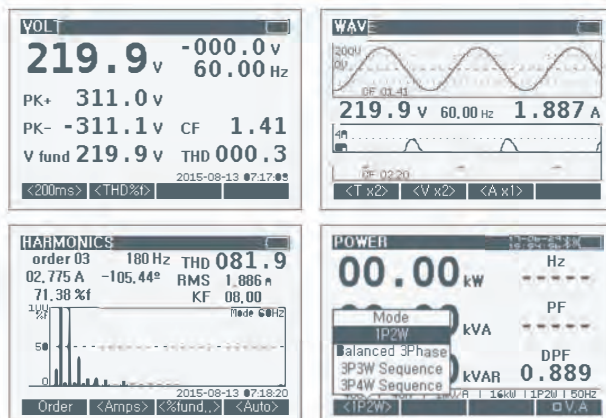
## Comparison of functions by model

| Function             | TEKON550A                          | TEKON550D                          |
|----------------------|------------------------------------|------------------------------------|
| DC voltage           | 1mV-600V                           | 1mV-600V                           |
| AC voltage           | 1mV-600V                           | 1mV-600V                           |
| DC                   | 10mA-1000A                         | 10mA-1000A                         |
| AC                   | 10mA-1000A                         | 10mA-1000A                         |
| Power                | 16W-600kW                          | 16W-600kW                          |
| Accumulated power    | ○                                  | ○                                  |
| Waveform measurement | DC to 100Hz                        | DC to 100Hz                        |
| Inrush current       | ○                                  | ○                                  |
| Harmonic             | 1 <sup>th</sup> ~ 50 <sup>th</sup> | 1 <sup>th</sup> ~ 50 <sup>th</sup> |
| THD                  | ○                                  | ○                                  |
| Trend analysis       | ○                                  | ○                                  |
| Data storage         | 20                                 | 20                                 |
| Cable tester         | x                                  | ○                                  |

## Accessories

|          |   |
|----------|---|
| Standard | Tester lead, CT (400A), NiMH battery pack, User's Manual, PC program, 12V/1A adaptor, bag |
| Option   | AC 400A CT (clamp-on type)<br>AC 1000A Current Clamp                                      |

## Display



## Electrical specifications

### Measurement of power (Auto/Manual)

|                        |   |
|------------------------|---|
| Power                  | 1P2W, 3P3W (balance), 3P3W, 3P4W (sequential measurement) |
| Measurement range      | 16W-600kW   |
| Measurement parameters | Active power, inactive power, apparent power              |
| Resolution             | 100mW   |
| Quality of power       | Power, power factor (PF), THD (%), unbalanced rate (%)    |
| Frequency              | 40Hz-200Hz  |

### Measurement of Energy (Auto)

|                   |  |
|-------------------|--|
| Measurement value | Active power, inactive power, apparent power     |
| CO2 emission      | Displayed simultaneously with energy measurement |

### Measurement of waveform (Auto/Manual)

|                |   |
|----------------|---|
| Measuring mode | Measures voltage and current at the same time |
| Bandwidth      | DC to 100Hz                                   |

### Inrush current

|          |                         |
|----------|-------------------------|
| Target   | Current                 |
| Waveform | Time, measurement value |

### Measurement of harmonic

|                              |                  |
|------------------------------|------------------|
| Order of harmonic            | 1th ~ 50th       |
| Display of measurement value | Chart, graph     |
| Target                       | Voltage, current |

### THD (Total Harmonic Distortion)

|                              |                  |
|------------------------------|------------------|
| Measuring mode               | Voltage, current |
| Display of measurement value | THD-F, THD-R     |

### DC Voltage (Auto/Manual)

|                   |                     |
|-------------------|---------------------|
| Measurement range | 4V, 40V, 400V, 600V |
| Resolution        | 1mV                 |
| Accuracy          | ±0.5% + 5 dgts      |

### AC Voltage (Auto/Manual)

|                   |                            |
|-------------------|----------------------------|
| Measurement range | 4V, 40V, 400V, 600V        |
| Resolution        | 1mV                        |
| Accuracy          | ±0.75% + 5dgts(40Hz-200Hz) |

### DC Current/Manual

|                   |                      |
|-------------------|----------------------|
| Measurement range | 4A, 40A, 400A, 1000A |
| Accuracy          | ±0.5% + CT Tolerance |

- Current sensor: Selects in User Mode

### AC Current/Manual

|                   |                                     |
|-------------------|-------------------------------------|
| Measurement range | 4A, 40A, 400A, 1000A                |
| Accuracy          | ±0.75% + CT Tolerance(40Hz ~ 200HZ) |

- Current sensor: Selects in User Mode

- Flexible (Rogowski coil) current sensor (1000A) applied

### Trend Mode

|              |                               |
|--------------|-------------------------------|
| Setting      | Sampling time                 |
| Max sampling | 2,400 cases                   |
| Analysis     | Cursor variable, Data storage |

### Event analysis

|        |                       |
|--------|-----------------------|
| Target | Swell, Dip, Interrupt |
|--------|-----------------------|

### Storage of measurement data

|                 |          |
|-----------------|----------|
| Type of storage | Snapshot |
| Max storage     | 20       |