

## UT285C

### Three Phase Power Quality Analyzer



Transformer K  
factor



Power factors (PF)  
and displacement  
factors (DPF or COSΦ)



Short-term voltage  
flicker (PST)



Three phase  
unbalance (current  
and voltage)



USB interface  
/PC software

| Specifications                               | UT285C                                                                                                                                                     |                                                                         |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| True RMS phase-to-neutral voltage            | 1.0V~1000V                                                                                                                                                 | ±(0.5%+5dgt)                                                            |
| True RMS phase-to phase voltage              | 1.0V~2000V                                                                                                                                                 | ±(0.5%+5dgt)                                                            |
| DC voltage                                   | 1.0V~1000V                                                                                                                                                 | ±(1.0%+5dgt)                                                            |
| True RMS current                             | 10mA~1000A                                                                                                                                                 | ±(0.5%+5dgt)                                                            |
| Peak of phase-to-neutral voltage             | 1.0V~1414V                                                                                                                                                 | ±(1.0%+5dgt)                                                            |
| Peak of phase-to-phase voltage               | 1.0V~2828V                                                                                                                                                 | ±(1.0%+5dgt)                                                            |
| Current peak                                 | 10mA~1414A                                                                                                                                                 | ±(1.0%+5dgt)                                                            |
| Active power                                 | 0.000W~9999.9kW                                                                                                                                            | ±(1%+3dgt)<br>Cosφ≥0.8<br>±(1.5%+10dgt)<br>0.2≤Cosφ<0.8<br>±(1%+3dgt)   |
| Reactive power, inductive or capacitive      | 0.000RVA~9999.9kVAR                                                                                                                                        | Sinφ≥0.5<br>±(1.5%+10dgt)<br>0.2≤Sinφ<0.5<br>±(1%+3dgt)                 |
| Apparent power                               | 0.000VA~9999.9kVA                                                                                                                                          | ±(1.5%+3dgt)<br>Cosφ≥0.5<br>±(1.5%+10dgt)<br>0.2≤Cosφ<0.5<br>±(1%+3dgt) |
| Power factor                                 | -1.000~1.000                                                                                                                                               | Cosφ≥0.8<br>±(1.5%+10dgt)<br>0.2≤Cosφ<0.8<br>±(1%+3dgt)                 |
| Active energy                                | 0.000Wh~9999.9MWh                                                                                                                                          | Sinφ≥0.5<br>±(1.5%+10dgt)<br>0.2≤Sinφ<0.5<br>±(1%+3dgt)                 |
| Reactive energy, inductive or capacitive     | 0.000VARh~9999.9MVARh                                                                                                                                      | ±(1.5%+10dgt)<br>0.2≤Sinφ<0.5<br>±(1%+3dgt)                             |
| Apparent energy                              | 0.000VAh~9999.9MVAh                                                                                                                                        | ±(2°)                                                                   |
| Phase angle                                  | -179°~180°                                                                                                                                                 | φ:±(1°)                                                                 |
| Tanφ (VA>50VA)                               | -32.76~32.76                                                                                                                                               | φ:±(1°)                                                                 |
| Phase shift of power factor (DPF)            | -1.000~1.000                                                                                                                                               | ±(1%+5dgt)                                                              |
| Harmonic ratio<br>(order 1 to 50) (Vrms>50V) | 0.0%~99.9%                                                                                                                                                 | ±(3°) harmonics of order 1 to 25<br>±(10°) harmonics of order 26 to 50  |
| Harmonic angle (Vrms>50V)                    | -179°~180°                                                                                                                                                 | ±(1%+5dgt)                                                              |
| Total harmonic ratio                         | 0.0%~99.9%                                                                                                                                                 | ±(1%+10dgt)                                                             |
| Distortion factor (DF or THD-R)<50           | 0.0%~99.9%                                                                                                                                                 | ±(5%)                                                                   |
| Transformer K factor                         | 1.00~99.99                                                                                                                                                 | ±(1%)                                                                   |
| 3 phases unbalance                           | 0.0%~100%                                                                                                                                                  |                                                                         |
| Number of channels                           | 4U/4I                                                                                                                                                      |                                                                         |
| Parameters of electricity                    | W, VA, Var, PF, DPF, cosφ, tanφ                                                                                                                            |                                                                         |
| Energy parameters                            | Wh, Varh, Vah                                                                                                                                              |                                                                         |
| Harmonic                                     | 50                                                                                                                                                         |                                                                         |
| Total harmonic distortion                    | Order 0~50, each phase                                                                                                                                     |                                                                         |
| Expert mode                                  | √                                                                                                                                                          |                                                                         |
| Number of Transient records                  | 150 sets                                                                                                                                                   |                                                                         |
| Min/Max                                      | √                                                                                                                                                          |                                                                         |
| Alarm                                        | 40 different types of parameter selections, 12,800 sets alarm logs                                                                                         |                                                                         |
| USB interface/PC software                    | √                                                                                                                                                          |                                                                         |
| Power                                        | 9.6V rechargeable lithium-ion battery                                                                                                                      |                                                                         |
| Product color                                | Red and grey                                                                                                                                               |                                                                         |
| Product net weight                           | Instrument: 1.6kg, current clamp: 510g x 4                                                                                                                 |                                                                         |
| Product size                                 | 240mm x 170mm x 68 mm                                                                                                                                      |                                                                         |
| Standard accessories                         | 1pc carry cloth bag, (yellow, green, red, blue, black total 5pcs test lead), 4pcs alligator clip, 1pc power adapter, 4pcs 1000A current clamp Inner carton |                                                                         |
| Standard individual packing                  | 1pc                                                                                                                                                        |                                                                         |
| Standard quantity per carton                 | 440 x 320 x 330mm                                                                                                                                          |                                                                         |
| Standard carton measurement                  | 6.4kg                                                                                                                                                      |                                                                         |
| Standard carton gross weight                 |                                                                                                                                                            |                                                                         |



Current

008B current clamp: 10mA~10.0A; (Optional)  
040B current clamp: 0.10A~100A; (Optional)  
068B current clamp: 1.0A~1000A; (Standard)  
300F flexible current sensor (with Integrator): 10A~6000A (Optional)