

# Fully-automatically Multi-functional Surge Testing Bench CWS 3000M

# Datasheet



## In compliance with

- > IEC 61000-4-5
- > GB/T 17626.5
- > GB/T 16927.1
- > ITU K.21
- > ITU K.44

#### Introduction

The CWS series fully-automatically multi-functional surge testing bench is designed on the basis of third-generation intelligent programmable testing platform. Adopted programmable controller and computer technology, system composition is simplified, which greatly improve the system reliability. Unique color touch screen operating interface has friendly man-machine dialogue function. Easy operation makes kinds of testing carried out automatically only through setting up testing requirement on page of parameter setup. The product has the advantage of highly integration level, control intelligentization, user-friendly operation and saving testing time.

#### **Features**

- > 5.7" color touch screen front panel
- > Judge kinds of failures automatically and with audible and visual alarm
- > Wide range output, minimum voltage up to 2 kV
- > LAN communication interface for remote control
- > Fully automatically CDNs are available optionally
- > Selectable current and voltage two-way peak acquisition and displayed on touch screen
- > 19" standard rack

### **Application Areas**

> Communication > Technology

> Telecom > Military

> Medical > Avionics

> Broadcast > New Energy Electrical Power

> Railway > New Energy Vehicles

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| Combination Waveform CWM 3000CW |                          |
|---------------------------------|--------------------------|
| Open-circuit Voltage            |                          |
| Peak Voltage                    | 2 kV ~30 kV (±10%)       |
| Front Time                      | 1.2 µs (±30%)            |
| Duration Time                   | 50 μs(±20%)              |
| Short-circuit Current           |                          |
| Peak Current                    | 1 kA~15 kA(±10%)         |
| Rise Time                       | 8 µs (±20%)              |
| Duration Time                   | 20 μs (±20%)             |
| Virtual Impedance               | 2 Ω ± 0.25 Ω             |
| Output Polarity                 | Positive/Negative        |
|                                 | Single/three-phase fully |
| CDNs (Externally)               | automatically CDNs are   |
|                                 | available optionally     |

| Voltage Waveform CWM 3000V |                       |
|----------------------------|-----------------------|
| Output Voltage             | 1 kV ~30 kV (±10%)    |
| Output Impedance           | 500 Ω±10%             |
| Output Polarity            | Positive/Negative     |
| Output Voltage             | 1.2 μs±30%, 50 μs±20% |
| Waveform                   |                       |

| <b>Current Waveform CWM 3000C</b> |                     |  |
|-----------------------------------|---------------------|--|
| Charging Voltage                  | 2 kV ∼15 kV         |  |
| Output Current                    | 8 μs±20% ,20 μs±20% |  |
| Waveform                          |                     |  |
| Output Impedance                  | 0.5 Ω               |  |
| Output Short-circuit              | 4 kA~30 kA ±10%     |  |
| Current                           |                     |  |

| <b>Communication Waveform CWM 1000T</b> |                        |
|---|------------------------|
| Output Voltage                          | 1 kV ~10 kV (±10%)     |
| Output Impedance                        | 15 Ω, 40 Ω (25 Ω+15 Ω) |
| Output Polarity                         | Positive/Negative      |
| Output Voltage                          | 10 μs±30%, 700 μs±20%  |
| Waveform                                |                        |
| Output Current                          | 5 μs±20%, 320 μs±20%   |
| Waveform                                |                        |

Note: the functions above are available on customer request.

| General Parameters      |                                  |
|-------------------------|----------------------------------|
| Working Power           | AC 110 V/220 V (±10%), 50/60     |
| Source                  | Hz(AC 220 V in Mainland China)   |
| Ambient Temperature     | 15 ℃ - 35 ℃                      |
| Relative Humidity       | 45%-75%                          |
| Atmospheric<br>Pressure | 86 kPa-106 kPa                   |
| Grounded<br>Resistance  | Not exceeding 0.5 Ω              |
| Dimension               | 19"/35 U (600 mm×800 mm×1850 mm) |
| Weight                  | Approx. 200 kg                   |

| Options           |                              |
|-------------------|------------------------------|
| Oscilloscope      | MDO 3012                     |
| Wide-band Current | CM 0220M                     |
| Monitor           |                              |
| Voltage Probe     | Tektronix P 6015A            |
| Control Software  | Corelab for remote control   |
| Measurement       | MAS 3000                     |
| Software          |                              |
| CDNs              | SPN 3820TA30 three-phase     |
|                   | coupling/decoupling networks |
|                   | AC 380 V, 20 A               |

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