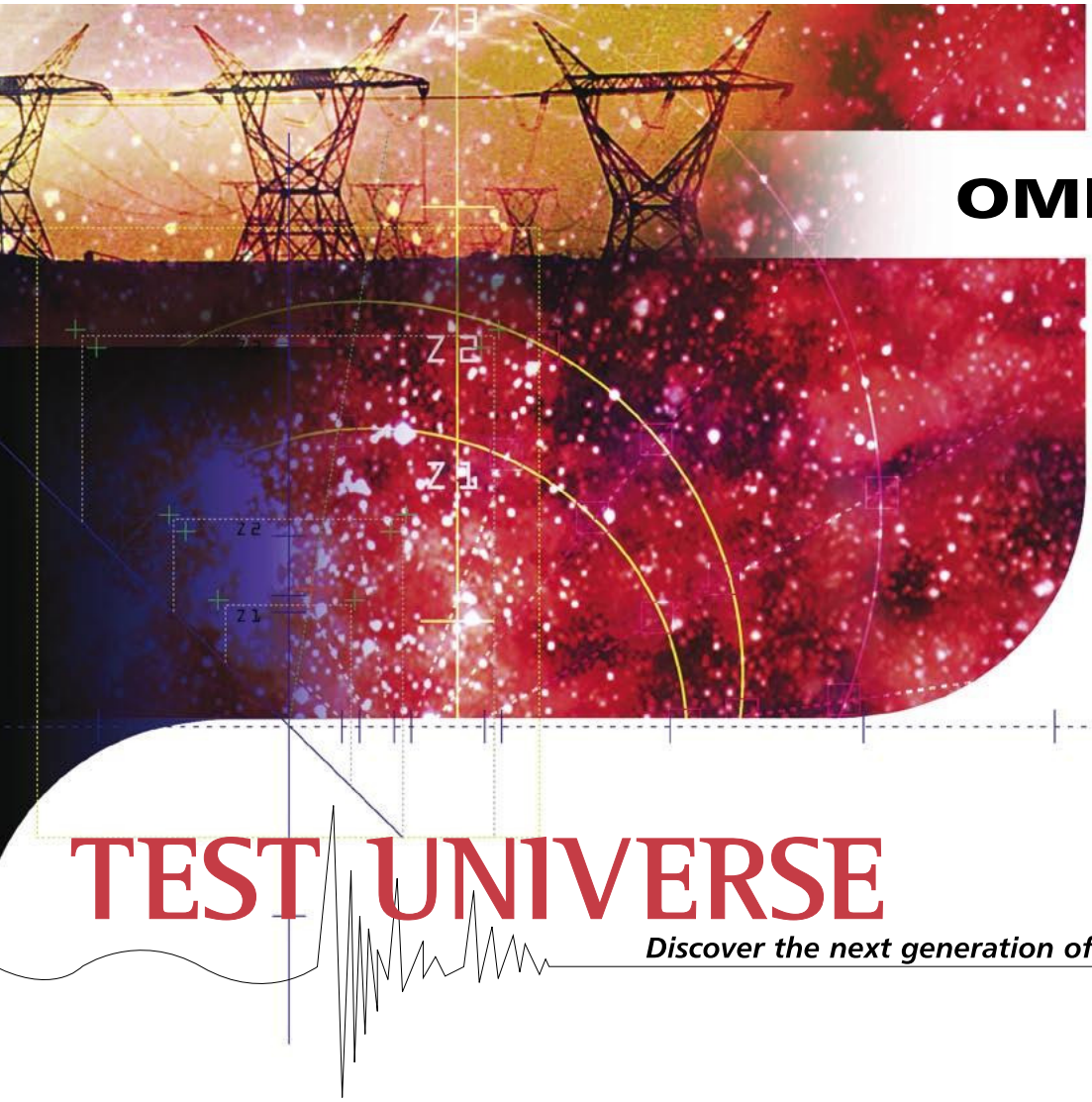


OMICRON

TEST UNIVERSE

Discover the next generation of protection testing solutions

CMC 256plus

World leading protection relay test set and universal calibrator



the reference

Generation • Transmission • Distribution • Industry • Railways

CMC 256plus - technology leadership i

The CMC 256plus is the universal solution for testing old and new generations of relays and calibrating all kinds of meters, power quality devices and transducers. It is the first choice for all applications requiring the highest versatility and accuracy. With its IEC 61850 GOOSE and Sampled Values simulation and subscription functionality the CMC 256plus leads the way in testing IEC 61850 substations.

DC supply (0 ... 264 V)

4 x 300 V / 1 x 600 V
typ. error < 0.015 % rd. + 0.005 % rg.



The accuracy of a reference source!

6 x 12.5 A / 3 x 25 A / 1 x 75 A
typ. error < 0.015 % rd. + 0.005 % rg.

Generator combination socket
3 x 300 V / 3 x 25 A

n protection testing

4 binary outputs

DC measuring inputs
(0 ... 10 V / 0 ... 20 mA)

450 x 145 x 390 mm (17.7 x 5.7 x 15.4“)
15.9 kg (35 lb.)



Rear side

2 counter inputs

4 binary outputs (transistor)

GPS / IRIG-B synchronization interface

Low level outputs 1 - 6, and 7 - 12 (Option LLO-2) (0 ... 10 V)

Ethernet interfaces
RJ45 / optical for PC control and IEC 61850 GOOSE and Sampled Values

10 multifunctional inputs, binary (dry/wet) analog measurement, EnerLyzer™

the reference!

... unrivaled range of applications

The CMC 256plus is the right choice if high precision is required. This device is not only an excellent protection test set for all protection generations (from IEC 61850 IEDs to high-burden, electromechanical relays - in single-phase mode) but also a universal calibrator.

The high end hardware design with it's unrivaled stable signal generation and the extremely low drift enables OMICRON to specify accuracy data that are guaranteed for one year. The high-accuracy current and voltage sources allow the user to calibrate a wide spectrum of measurement devices used in power engineering including electricity meters of class 0.2, transducers, power quality-, and synchrophasor measurement devices (IEEE C37.118). It is unique in that the sources are the reference, thus no additional reference meter is required.

The combination of protection testing functionalities and unique accuracy over the complete amplitude range paves the way to a wide range of applications.

Protection Relay Test Set

- IEC 61850 IEDs
- Numerical relays
- Static relays
- Electromechanical relays (high burden relays / single phase)
- Relay panels
- End-to-End testing
- Busbar protection (22 generators)
- Wide area protection

Power System Simulator

- Transient fault simulation
- Power swing
- CT saturation simulation
- CB simulation
- Rogowski coil simulation
- Compensated network
- Transient playback (e.g. COMTRADE)

Substation Commissioning

- Checking SCADA annunciations
- Burden measurement
- CT/VT polarity checker
- Wiring checker
- Event recording

Programmable Voltage and Current Source

- Production quality assurance
- Manufacturer of substation equipment
- Research & development

Universal Calibrator

- Electricity meters, 4 quadrants, class 0.2
- Transducers
- Power quality meters according to IEC 61000
- Synchrophasor measurement devices
- SCADA measuring equipment
- Protection relays
- Transient recorders (incl. time stamp accuracy)
- Any measuring equipment for V, I, f, S, P, Q ...

Portable 10-Channel Measurement Device - EnerLyzer™

- Transient recording (trigger: binary, PQ, GPS)
- Multi meter for: I, V, f, S, P, Q, cos φ ...
- Trend recording for: I, V, f, S, P, Q
- Harmonics analysis



CMC 256plus

OMICRON

12 reasons why ...



- Protection test set and universal calibrator in one device
- Testing of all relay generations (electromechanical, static, numerical, IEC 61850 IEDs)
- The signal sources are the reference - no additional reference meters are required
- 22 voltage/current generators in one device
- End-to-End testing with GPS or IRIG-B (typical error $< 1\ \mu s$)
- Test Universe software with unrivaled manual and automatic testing functionality
- OMICRON Protection Testing Library - test templates for the most important relays
- TestBase - relay data and test administration database
- Highest quality, safety, reliability and robustness
- Worldwide high quality technical support
- Worldwide training courses designed for electric power system technicians and engineers
- OMICRON provides platforms for an international knowledge exchange









OMICRON is an international company providing innovative power system testing solutions. With sales in more than 120 countries, offices in Europe, North America, and Asia, and a worldwide network of distributors and representatives, OMICRON has truly established its reputation as a quality supplier of leading edge technology with highest customer orientation.

OMICRON's automated primary and secondary testing capabilities are important benefits in light of the changing market conditions, resulting in restructured organizations required to "do more with less". Services in the area of consulting, commissioning, testing and training make the product range complete.

Specialization and visionary leadership allows OMICRON to continue with revolutionizing developments for its solutions to meet the customer needs of the 21st century.

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