OMICRON CPC100 – Multi functional Primary test Kit

Multi-functional primary test system for substation commissioning and maintenance. (Standard Package).

Generator / Outputs

Current outputs

Range	Amplitude	t_{max} [1]	V_{max} [2]	$Power_{max}$ [2]	f
800 A AC[3]	0 ... 800 A	25 s	6.0 V	4800 VA	15 Hz ... 400 Hz
	0 ... 400 A	8 min.	6.4 V	2560 VA	15 Hz ... 400 Hz
	0 ... 200 A	> 2 h	6.5 V	1300 VA	15 Hz ... 400 Hz
6 A AC[10]	0 ... 6 A	> 2 h	55 V	330 VA	15 Hz ... 400 Hz
3 A AC[10]	0 ... 3 A	> 2 h	110 V	330 VA	15 Hz ... 400 Hz
400 A DC	0 ... 400 A	2 min.	6.5 V	2600 VA	DC
	0 ... 300 A	3 min.	6.5 V	1950 VA	DC
	0 ... 200 A	> 2 h	6.5 V	1300 VA	DC
6 A DC[4, 10]	0 ... 6 A	> 2 h	60 V	360 VA	DC

2000 A AC[3] with an optional current booster (CP CB2)

Voltage outputs

Range	Amplitude[5]	t_{max}	I_{max}	$Power_{max}$ [5]	f
2 kV AC[3]	0 ... 2 kV	1 min.	1.25 A	2500 VA	15 Hz ... 400 Hz
	0 ... 2 kV	> 2 h	0.5 A	1000 VA	15 Hz ... 400 Hz
1 kV AC[3]	0 ... 1 kV	1 min.	2.5 A	2500 VA	15 Hz ... 400 Hz
	0 ... 1 kV	> 2 h	1.0 A	1000 VA	15 Hz ... 400 Hz
500 V AC[3]	0 ... 500 V	1 min.	5.0 A	2500 VA	15 Hz ... 400 Hz
	0 ... 500 V	> 2 h	2.0 A	1000 VA	15 Hz ... 400 Hz
130 V AC[10]	0 ... 130 V	> 2 h	3.0 A	390 VA	15 Hz ... 400 Hz

Using the CPC 100, electrical tests on various assets can be performed:

Current transformers

Voltage transformers

Power transformers

Power lines

High-voltage (HV) cables

Grounding systems

Rotating machines

GIS systems

Switchgear and circuit breakers

IEC 61850 installations

Protection relays

Address: Barwa Village, Building 6, Shop 9
Po Box: 31509; T: +974 4460 4564; F: +974 4442 1581; W: www.raptorsqatar.com

OMICRON CMC356 – The Universal Relay Test Set and commissioning tool

The Universal Relay Test Set and Commissioning Tool (Protection package + Advance Distance and Advanced Diffrerential Test modules)

- Quick CMC
- State Sequencer
- Ramping
- Transplay
- Harmonics
- Binary I/O monitor
- CB Simulator
- Polarity Checker
- Aux DC Configuration
- Pulse Ramping
- Over current
- Over current Char. Grabber
- Distance
- Differential
- Auto reclosure
- Advanced Distance
- Advanced Differential.

OMICRON CT Analyzer – Current Transformer testing

Current transformer testing, calibration and assessment

>> Ratio and phase accuracy
>> Winding resistance
>> Excitation characteristics (knee points)
>> Composite error (ALF, ALFi, FS, FSi, V_b)
>> Burden impedance
>> Transient CT classes and parameters (TPS, TPX, TPY and TPZ type CTs)
>> Transient dimensioning factor (Ktd)
>> If missing/unknown: CT type, class, ratio, knee point, power factor, nominal burden, operating burden, primary and secondary winding resistance
>> Remanence and residual magnetism
>> Immediate good/bad evaluation

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OMICRON TESTRANO 600 – Three Phase test system for distribution and power transformer

Three-phase test system for comprehensive power and distribution transformer testing - Standard package

TESTRANO 600 is the world's first portable, three-phase test system which supports all common electrical tests on single- and three-phase power and distribution transformers.

- PTM Standard software license, including manual control mode and report generator
- Quick test
- Transformer Turns ratio (TTR) / Exciting Current
- DC Winding resistance.
- Demagnetization
- Short Circuit impedance / Leakage Reactance
- Frequency response of Stray Losses (FRSL)
- Power losses at low voltage.
-

Your benefits

- > True three-phase power transformer test set
- > Powerful device with 3 x 33 A DC or 400 V AC
- > Reduced wiring effort as same wiring can be used for different tests
- > Three times faster testing
- > Automatic tap changer control and measurement, no accessory required
- > Fast and reliable demagnetization of transformer's core

OMICRON CIBANO 500 – Test kit for MV and HV breaker

3-in-1 test system for medium- and high-voltage circuit breakers

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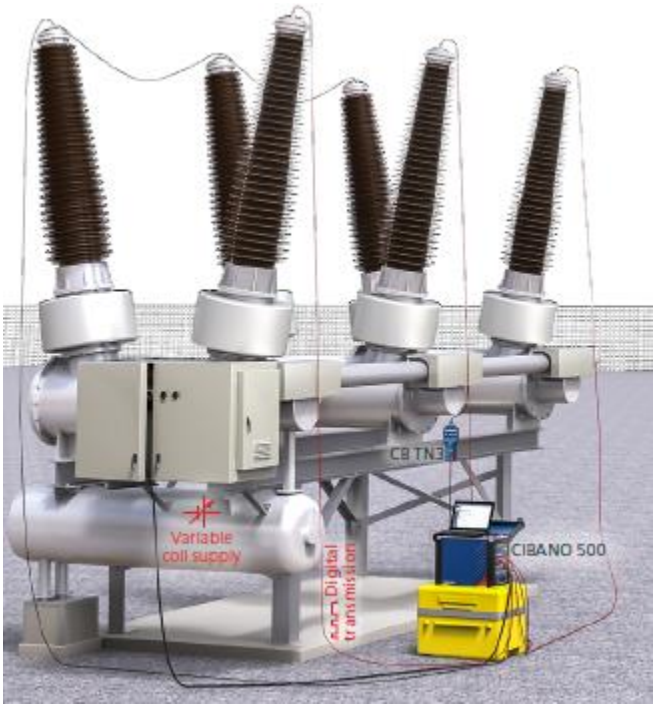
OMICRON's CIBANO 500 is the world's first circuit breaker test system to combine a multi-channel timing and travel analyzer a high-accuracy digital micro-ohm (μΩ) meter, and a coil and motor supply within one device.



It combines:

>> a multi-channel timing and travel analyzer

>> a high-accuracy digital micro-ohm (μΩ) meter, and a powerful and adjustable coil and motor supply with 2.4 kW.

The lightweight test system can perform all common electrical tests on

>> medium-voltage circuit breakers and

>> high-voltage circuit breakers

Your benefits

- Easy-to-use 3-in-1 system: digital micro-ohm (μΩ) meter, AC/DC supply, and timing and travel analyzer
- Versatile system for medium- and high-voltage circuit breakers (including GIS)
- Lightweight test system (20 kg / 44 lbs) for easy transportation to test site

Common Tests:

- Timing
- Static contact resistance
- Motion / Contact travel
- Dynamic contact resistance
- Coil / Motor current analysis
- Under voltage condition
- Minimum Pick up

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HILLSTONE HAC415-200 – THREE PHASE 415V, 50 Hz, 200 kW AC Resistive Load Bank

The Hillstone HAC series load banks offer a low-cost solution to on-site AC testing of generators and UPS systems. Load step – 1 kW

Load Bank Type Ref	Max. Volts	Power at 415V	Amps at 415V	Power at 400V	Amps at 400V	Power at 380V	Amps at 380V
HAC415-200	415V	200.0KW	277.8A	183.7KW	266.2A	168.1KW	243.6A

HILLSTONE HACV415-500 – THREE PHASE 415V, 50 Hz, 500 kW AC Resistive Load Bank

The Hillstone HACA - series of automatic load banks offer a dual usage solution to on-site generator maintenance and operation issues, such as running the genset on low load which causes wet stacking of the diesel engine.

HACV415 Performance Table:

Load Bank Type Ref	Max. Volts	Power at 415V	Amps at 415V	Power at 400V	Amps at 400V	Power at 380V	Amps at 380V
HACV415-500	415V	500KW	694A	459KW	665A	420KW	608A

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HILLSTONE HAC230-6RM - SERVER SIMULATOR LOAD BANK, SINGLE PHASE / THREE PHASE, 50 Hz , 6.6 kW AC Load Bank

Availability in stock: 500 Nos.

Three Phase Ratings					
	Power	Amps	Switch steps		
Step 1	3300W	4.8A	1-1	2-1	3-1
Step 2	6600W	9.6A	1-1	2-1	3-1
			1-2	2-2	3-2

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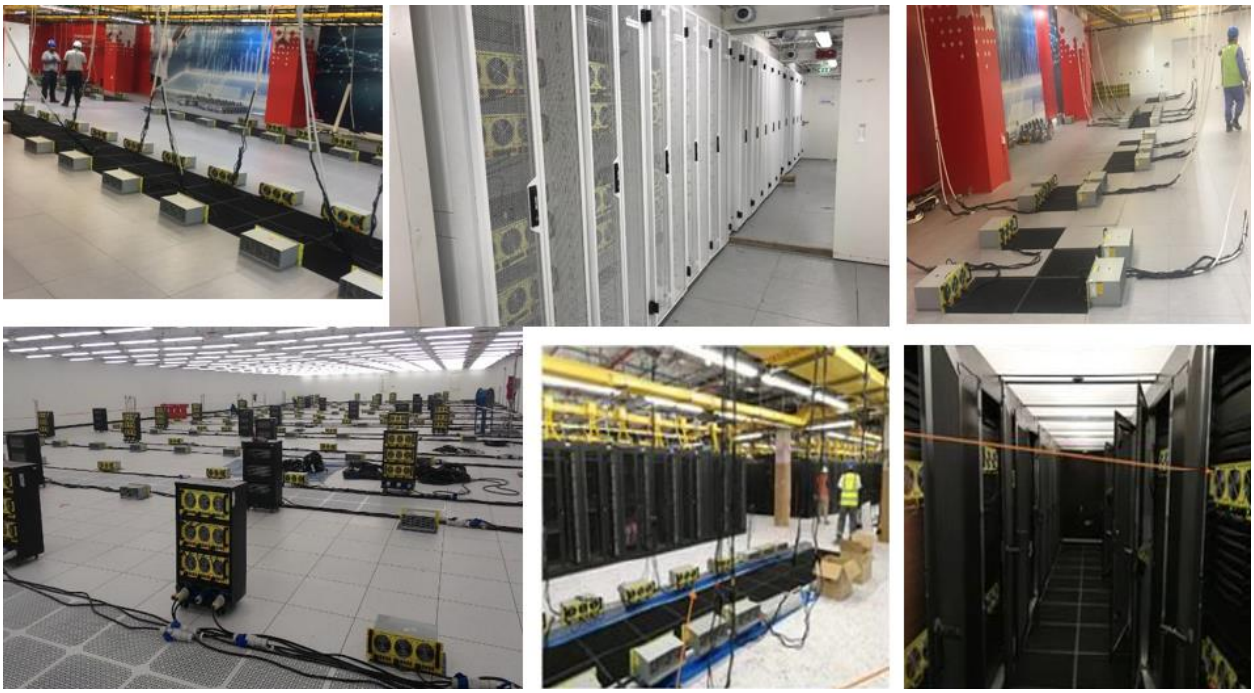

Single Phase Load Switch Ratings				Panel Socket
Load 1	1-1	4.8A	1100W	C20
	1-2	4.8A	1100W	C20
Load 2	2-1	4.8A	1100W	C20
	2-2	4.8A	1100W	C20
Load 3	3-1	4.8A	1100W	C20
	3-2	4.8A	1100W	C20
			6600W	

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HAC230-6RM Specification

Type Ref	HAC230-6RM
Max Voltage	230 volts, single phase 50/60 hz
Full Load Rating	Nominal: 6666W - 29A - 230V single phase Nominal: 6666W - 9.6A - 400V 3 phase
Controls	3 separate 2222W loads at 230V Each load adjustable in 2 steps of 1111W
Adjustment	6 x 1111W steps, selected via panel mounted illuminated switches
Connection	Three C20 panel mounted sockets for each independent load channel
Cooling	3 low noise, horizontal force air cooling fans, powered from the test source. Cool air intake at front, hot air exhaust at rear.
Airflow	Each fan 144 m3/hr at minimum pressure zero Pa. (Static) Total airflow 432 m3/hr
Element Type	High temperature ni-chrome tape wound mounted on mica composite card.
Dimensions & Weight	4U (176mm high x 250mm deep plus handles) 19" rack assembly. Weight 8 kgs
Construction	Zintec steel, with powder coated yellow gloss finish front panel. Enclosed tray assembly with rear grill
Operating Temperature	0 - 45°C / 0 - 113°F
Storage Temperature	0 - 80°C / 0 - 176°F
Movement	Front handles for slide in assembly to 19" racks
Optional Extras	Cables: 1phase or 3 phase

FUGUANG IDCE- 2430S (24V, 300A) DC LOAD BANK

IDCE-2430S	
Battery Nominal Voltage	**Max Discharge Current**
24 V	**300 A**

IDCE-2430S	
Stop Point	**Setting Range**
Group Low Voltage	**21.0 - 27.0 V**
Discharge Time	**0 - 99 Hour 99 Min**
Discharge Capacity	**0 - 9999 AH**

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Voltage range	current range
21-30V	0-300 A
Internal current range	0-300 A
Accuracy & resolution	≤±0.5%, 0.1 A
External current range	0-600 A
Accuracy & resolution	≤±1%, 0.1 A
Group voltage range	21-30 V
Accuracy & resolution	≤±0.5%, 0.1 V
Power supply voltage	21-30V
Power consumption	250W(max)
Operation temperature	-5 to 50° C
Storage temperature	-40 to 70° C
Humidity	5% - 95% RH
Altitude	below 4000 m
Working noise	<60 dB
Main tester	628 x 223 x 372 mm
Carrying case	700 x 620 x 280 mm
Weight	18 kg (main tester only)
Carry case	1 x 700 x 620 x 280 mm, 15 kg
Power cable	2 x 3 m cables 120 mm^2
User manual	1

HILLSTONE HCC60-300 DC LOAD BANK

Load Bank Type Ref	Max Volts	Amps At 20V to 40V	Amps At 40V to 60V
HCC60-300	60V	0 – 150A	0 – 300A

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HILLSTONE HCWM 280-840 DC LOAD BANK

Hillstone type ref	DC voltage range	20-40V	40-60V	96-130V	190-260V
HCWM280-840	60A	120A	120A	120A	60A

HILLSTONE HBN 130-350 (130V, 350A) DC LOAD BANK

Address: Barwa Village, Building 6, Shop 9
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Load Bank Type	Max Volts	Available current at different test voltages					
		130V	120V	110V	99V	88V	60V
HBN130-350	130V	350A	323A	296A	267A	237A	162A

FUGUNAG IDCE 60010-CT

Battery Nominal Voltage	Max Discharge Current
380 V	100 A
480 V	100 A

Stop Point	Setting Range
Group Low Voltage	0 - 600.0 V
Discharge Time	0 - 99 Hour 99 Min
Discharge Capacity	0 - 9999 AH
Cell Low Voltage	0 - 15.00 V

SPECIFICATIONS

Discharge Ranges

Voltage range	current range
300-600V	0-100 A

Current measurement

Internal current range	0-100A
Accuracy & resolution	≤±0.5%, 0.1 A
External current range	0-100A
	(optional current clamp)
Accuracy & resolution	≤±1%, 0.1 A

Voltage measurement

Group voltage range	0-600 V
Accuracy & resolution	≤±0.5%, 0.1 V
Cell voltage range	0-15V
Accuracy & resolution	≤±0.5%, 0.01 V

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MEGGER EZ THUMP-4 and DigiPHONE+ (LV Cable fault Locator)

The EZ-THUMP4 is a compact and lightweight, battery and AC line operated, portable cable fault location systems. They are designed for quick, effective, accurate and safe fault locating operations to greatly reduce system customer outage minutes.

B2 HVA34 – VLF Test Kit (34 kV Peak, 28 kV rms)

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0.5µF at 0.1 Hz at 24 kV_{rms}

19.5 kg

VLF 0.1 Hz 34 kV_{peak}

B2 HVA68-2 – VLF Test Kit (68 kV Peak, 48 kV rms)

Features

- Output voltage 48 kV_{rms}
- Pure sinusoidal output voltage (load-independent)
- Output current 80 mA max.
- Highest test capacity of 10µF
- Unlimited and continuous duty cycle
- Cable testing according: CENELEC HD 620/621,IEEE 400.2-2004, IEC60502-2:2014
- Programmable test sequences
- PC software "b2 Control Center" with various reporting functions included
- Upgradable with Partial Discharge diagnostic and Tan Delta Diagnostics System (optional)
- 12kV transient protection (50 Hz)
- Dual Discharge Device (DDD®), two integrated and automatic discharge devices
- Easily exchangeable HV cable
- Real time oscilloscope display of output voltage
- Breakdown voltage and load detection (R and C)

- RMS digital metering of voltage and current
- Vacuum Bottle Test
- Sheath Fault Locating (in combination with Earth Fault Locator) (not included)

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