



# Crestchic Loadbanks

WORLDWIDE LOADBANK SPECIALISTS

Keeping Industry's Power On Line



■ Crestchic  
LOADBANK  
RENTAL

Crestchic – the largest loadbank manufacturer in the world

LOADBANK RENTAL SOLUTIONS



# Which loadbank do you need?

Loadbank rental from Crestchic provides customers with flexible and convenient solutions for load testing, with a very wide range of loadbank specifications and delivery options.

## Specifying a loadbank

- Size and purpose of load required (Kw/kVA)?
- Test voltage?
- AC or DC test supply?
- If AC, is it single or three-phase, what frequency?
- Resistive (Unity Power Factor) or Resistive/Reactive (0.8 Power Factor typically)?
- Is remote control required?
- Length of remote control cable?
- Load cable length?
- Loadbank control type?
- Hire duration?
- Site location and type?
- Is a survey required?
- Weekday, evening or weekend time required on site?
- Installation by Crestchic?
- Do you need a Crestchic operator?



What's your guarantee of quality of product and service?

Crestchic is BS EN ISO 9001 2008 certified.



Crestchic portable loadbank solution used for heating and loading in a datacentre

# Typical worldwide applications

- Standard generator heat run
- Application and rejection of generator load
- Simulate motor starting
- Base load
- Battery discharge
- UPS systems
- Heaters (space and heat load for air conditioning tests)
- Distribution boards
- Transformers (heat rise tests)
- D.C. generator testing
- Frequency converters



## Resistive

Crestchic Resistive (Unity Power Factor) loadbanks can be specified to suit the needs of your application:

- Microprocessor ('Eclipse') or push-button (KCS) controlled
- 1kW load steps and intelligent paralleling of loadbanks
- Available in 30kW, 100kW, 200kW, 600kW, 1MW and 3MW units which can be linked to match your requirements
- Designed to operate at 3 phase, 1.0 Power Factor, 50 or 60Hz, single phase operations available
- Built in the UK to a high industrial standard, all manufacturing processes are BS EN ISO 9001 2008 certified
- Small Resistive loadbanks are castor-mounted for manoeuvrability on site

## Resistive/Reactive (Inductive) (0.8 Power Factor typically)

Crestchic Resistive/Reactive loadbanks can be specified to suit the needs of your application:

- Microprocessor ('Eclipse') or push-button (KCS) controlled
- 1kVA load steps, intelligent paralleling of loadbanks
- Microprocessor-enabled flexible reporting
- Available in 825kVA, 1000kVA, 1650kVA, 3.3MVA and 6MVA as standard 3 phase units
- Designed to operate at 3 phase, 0.8 lagging power factor, 50 or 60Hz
- Built in the UK to a high industrial standard, all manufacturing processes are BS EN ISO 9001 2008 and all units are housed in ISO type containers for protection, ease of transportation and shipping.

## DC

The Crestchic DC loadbank fleet is available from 24VDC – 700VDC and 200A – 3300A units. These loadbanks are controlled in 1Amp steps via a push button controller (constant current available).

Most DC loadbanks are small and easily portable.

## Transformers

Crestchic has a large fleet of containerised transformers from 2.9MVA to 5.8MVA. These transformers are multi-tap and can operate at voltages from 600V to 15kV. Crestchic transformers are supplied in standard ISO type containers fully bunded with save-all bases, compete with MV and LV switchgear.

## Specialised loadbanks

Current Crestchic specialised loadbanks available to rent include:

- 150KVAr Reactive (inductive) only loadbanks
- 120KVA Resistive/Reactive 400Hz GPU tester
- 6MVA Resistive/Reactive 50/60Hz 690V containerised loadbank

Crestchic can build loadbanks and transformers quickly to customer specifications and supply to any location worldwide.



# Crestchic – AC Loadbank Solutions at a glance

# LOADBANK RENTAL SOLUTIONS



Crestchic has a  
loadbank  
capacity  
in excess of  
150MVA  
worldwide

Description	Rating	L	W	OH mm	Wt kg
30kW Resistive only	30kW nominal @415V 3ph, 50Hz	825	500	515	52
100kW Resistive only	100kW nominal @415V 3ph, 50Hz	750	875	720	130
200kW Resistive only	200kW nominal @415V 3ph, 50Hz	825	875	1350	220
300kW Resistive only	300kW nominal @400V 3ph, 50Hz	825	875	1350	250
600kW Resistive only	600kW nominal @415V 3ph, 50Hz	1550	1000	1520	650
1000kW Resistive only	1000kW nominal @415V 3ph, 50Hz	2285	1000	2100	1340
3000kW *C Resistive only	3000kW nominal @415V 3ph, 50Hz	2991	2430	2590	4300
150kVAR Reactive only	150kVAR nominal @415V 3ph, 50Hz	1500	1000	850	760
120kVA 400Hz GPU Tester	120kVA nominal @208V, 3ph, 400Hz, 0.8 PF fixed	1200	880	1400	360
825kVA *C Resistive/Reactive	825kVA nominal @480V, 3ph, 60Hz, 0.8 PF (620kVA, 415V, 3ph, 50Hz)	2430	1000	2300	3200
1000kVA *C Resistive/Reactive	1000kVA nominal @480V, 3ph, 60Hz, 0.8 PF (748kVA, 415V, 3ph, 50Hz)	2430	1000	2300	4000
1650kVA *C Resistive/Reactive	1650kVA nominal @480V, 3ph, 60Hz, 0.8 PF (1233kVA, 415V, 3ph, 50Hz)	1870	2430	2590	5500
3.3MVA *C Resistive/Reactive	3300kVA nominal @480V, 3ph, 60Hz, 0.8 PF (2466kVA, 415V, 3p, 50Hz)	2991	2430	2590	10100
6.0MVA *C Resistive/Reactive	6000kVA nominal @480V, 3ph, 60Hz, 0.8 PF (4485kVA, 415V, 3ph, 50Hz)	6058	2430	2590	18500
6.0MVA 690V *C Resistive/Reactive	6000kVA nominal @690V, 3ph, 60Hz, 0.8 PF (2170kVA, 415V, 3ph, 50Hz)	6058	2430	2590	18500
2.5MVA 11kV Combi-Unit	2.5MVA nominal @11kV, 3ph, 50Hz (All in 1x 20ft ISO container)	6058	2430	2590	15100

## AC LOADBANKS

\*C Indicates containerised loadbanks



Crestchic 12.5MVA, 11kV Solution on the W.A Platform in Baku

# Crestchic – DC Loadbanks and Transformers at a glance

Description	Rating	L	W	OH mm	Wt kg
250A 24V	250A nominal @24V	725	625	600	30
1500A 28V DC	1500A @28V	1020	600	800	172
2500A 28V DC (GPU Tester)	2500A @28V variable	1500	705	1305	350
600/330Amp 50/110V DC	600/330A nominal @50-110V variable	822	662	632	110
3300Amp 200V DC	3300A nominal @200V variable	1550	1000	1520	650
760/380A 220/440V DC	760/380A @220-440V DC	1200	880	1400	360
1900/950A 350/700V	950A nominal @700V variable	1550	1000	1520	650

## DC LOADBANKS



*Crestchic 20 foot ISO-type containerised Transformer*

To complement our fleet of loadbanks, Crestchic has a fleet of transformers for stepping voltage up or down.

All Crestchic containerised transformers are:

- Fitted complete with over current and short circuit protection on the MV breaker
- Fitted with MV & LV switchgear
- Fully banded to ensure no possible spillage
- Supplied with flexible MV cable in a wide range of lengths
- Suitable for operation in 'step up' mode for power generation

Crestchic MV specialist engineers/operators are available to install, commission and operate all packages.

Model kVA	Enclosure	Voltages	Length mm	Width mm	Height mm	Weight mm	Cooling
2900	ISO-type 10'	3.3 up to 15kV	2991	2430	2590	9500	Oil
5000	ISO-type 20'	11kV Fixed	6058	2430	2590	17500	Oil
5800	ISO-type 20'	3.3 up to 15kV	6058	2430	2590	18500	Oil

## TRANSFORMERS

# Crestchic – Loadbank Hire

## What you need to know

# LOADBANK RENTAL SOLUTIONS



## Unparalleled experience

Crestchic has over 20-years' experience in finding the correct load test solutions tailored to meet customer demands, varying from 10kW to 150MVA, including solutions for DC, AC and MV testing. With Crestchic, customers can choose to have equipment installed for self operation, operated by Crestchic, or simply delivered to site.

## Accessories

- Load cables: typically 35mm<sup>2</sup>, 75mm<sup>2</sup>, 90mm<sup>2</sup>, 150mm<sup>2</sup> and 240mm<sup>2</sup>. Cables are installed in accordance with current legislation: for large and long-duration loadbank installations cables are installed on cable tray, trefoil and tied.
- Loadbank control extension reels
- Cable junction boxes
- Eclipse laptop alternative loadbank control, for additional load features and data capture
- Medium voltage 'Nimbus' MV monitor and load data capture equipment; avoids losses associated with cables and transformers
- Auxiliary generators for loadbank fans and control systems
- Medium and Low Voltage qualified loadbank operators



Malta Dry Docks -  
A 6.8MVA Crestchic  
loadtest solution on  
the vessel 'The  
Fairmont Fjord'

## Delivery and installation options

Crestchic's standard installation service includes: delivery, installation, de-installation and collection of loadbank packages. As an alternative, Crestchic supply 'delivery only', where the equipment is delivered and collected with customers doing their own installations and operation.

Crestchic can supply loadbank operators if required.

## Support Services

- Crane lorry delivery
- Site surveys
- Layout drawings
- Risk assessments
- Method statements
- Full project management
- Logistics assistance: vehicle permits, road closures and environmental issues
- 24 hour service support



A 10 foot Crestchic loadbank on site in Singapore

# Crestchic – Control and Monitoring Systems

## Controls and reports

Loadbank control and test reporting is very important, as it is the output from the reporting system which indicates the success or failure of your equipment.

Crestchic AC loadbanks have a choice of microprocessor controls:

- Hand Held Terminal (supplied as the standard controller on all AC micro-processor loadbanks)
- The 'Eclipse' PC system intelligent control, which gives the operator features such as full load control, 3 ph instrumentation and much more
- Medium Voltage 'Nimbus' monitor/data capture system
- All Crestchic DC loadbanks and some AC loadbanks are 'dial load' controllers

## Hand Held Terminal

- Allows load steps down to 1kW/kVA
- Controls Resistive/Inductive loadbanks for any combination
- Fully adjustable lagging power factors from 0.0 to 1.0
- Manual load control giving 20 independent load settings of kW, kVA or Amps, Power Factor and time
- Load correction with learn feature to allow for volt drop

*Crestchic handheld terminal*



## Nimbus MV Monitor

The MV monitor allows real-time graph and data capture by a low voltage and current signal reference connecting direct to the MV switchboard or generator.

This system allows accurate data capture, avoiding losses associated with step-down transformers and load cables.

- Working voltage range 380V to 25kV
- Accurate and real data capture
- Use with the PC system full report printing

## Eclipse PC system

The Eclipse Windows-based PC system is used as an alternative to the Hand Held Terminal on any Crestchic micro-processor controlled loadbank. It provides enhanced load control, along with transient speed instrumentation, graph display and full data acquisition and reporting.



- Simulator and pre-programmable practice tool
- Manual load is selected by simple sliders allowing fully variable Power Factor
- Automatic load control gives the ability to create flexible and variable test profiles, which can be saved and run at a later date
- Load expressed as percent of supply or actual load
- Motor load ('M' load) automatically calculated
- Test program editor supports load ramping (load applied gradually over the time entered); automatic data capture as load change is performed; easy verification of test program from within the editor with single stepping
- Ability to add notes and customer annotations to reports
- All recorded data can be saved to disk

## Crestchic KCS control

The Crestchic KCS is a straightforward push-button controller that allows loads to be stepped in 1kW/1kVA steps.

- Simple to use
- Basic operation





**Crestchic Loadbanks**  
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## Crestchic Loadbank sale and rental

- AC loadbanks
- DC loadbanks
- MV monitoring
- MV loadbanks
- Neutral Earth Resistors
- Transformers
- Cables



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Efficient power generation, testing and system proving is vital. Loadbanks provide a stable, continuous and variable load to imitate real loads in real time. This means backup systems can be periodically fully tested, ensuring they meet the original design criteria.

Crestchic are loadbank specialists and have manufactured loadbanks for worldwide use since 1983; Crestchic are the largest loadbank manufacturer in the world. Crestchic have sales and rental offices in the UK, North America, Singapore, India, Germany, Brazil, Netherlands, Baku and Dubai.

