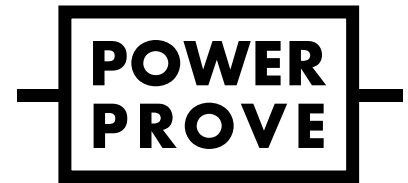


AC6 Series

AC6 Load bank



Light weight, compact load bank providing 6kW of load capacity, with a manual control interface.

Key features

Portability

At 12kg this lightweight, compact unit with lifting handle is highly portable. It neatly fits into site vans for convenience, and is easy to carry to the test locations.

Easy to use

Simple manual control interface enables fast set-up. Analogue meters in the AC6 provide clear real-time display of the voltage, current and frequency.

Cable stowage

With an integrated compartment to stow the supplied connection cable(s) the AC6 does not take up a lot of space either when in use or when being stored.

Site ready

The dual voltage (110V and 230V) version of the AC6 provides the convenience of a single piece of equipment ready to test performance of both 110V equipment and standard 230V supplies.

Optional extras

- **Supply cables** - made to order to the desired length and with supply side connection method to suit the intended use.
- **PVC storage cover** - available for protection during transport or storage.



Voltage rating options

The AC6 is available in 2 standard versions with the following voltage ratings:

Dual; 110V and 230V
Single; 230V only

Both versions are suitable for frequencies of 50Hz or 60Hz. Other voltages and frequencies are available on request.

Power ratings

	110V AC 1-phase	230V AC 1-phase
Maximum capacity, kW	3.3	6
Load step resolution, kW	0.30	0.33

Control and ventilation

Manual controls	6 x Load section toggle switches Single; 1 x on/off MCB switch Dual; 1 x 110/off/230 rotary selector switch
Control interface	Manual control (described above) 1 x Analogue volt meter 1 x Analogue frequency meter 1 x Analogue current meter
Cooling	Forced convection, horizontal cooling
Fan(s)	1 x AC axial type
Control supply	230Vac 1-phase
Source	Internal, taken from supply under test

Connection interfaces

Load connections	Single; 1 x 1.5m integrated lead with 230V 32A IEC60309 inline socket (1P+N+PE) Dual; as single plus 1 x 1.5m integrated lead with 110V 32A IEC 60309 inline socket (1P+N+PE)
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Operating environment

Suitable for	Indoor use only
Ambient temperature	-10°C to 50°C
Humidity	95% RH
Ingress protection	IP20

Construction

Resistor elements	Wound steel tape
Element material	High grade stainless steel
Enclosure	Aluminium, painted RAL9002 grey
Portability	1 x protective lid with integrated carry handle

Weight and dimensions

See general arrangement drawing reference 161471

Length, mm	495
Width, mm	220
Height, mm	550
Weight, kg	12

Safety

Electrical protection	Short circuit protection via MCB(s)
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Testing and standards

Every unit is subjected to routine testing before dispatch, including functional operation, electrical insulation testing and visual inspection.

Declaration of conformity document reference: 161472



Documentation

Supplied with an operation and maintenance manual and routine test report as standard.

Training and support

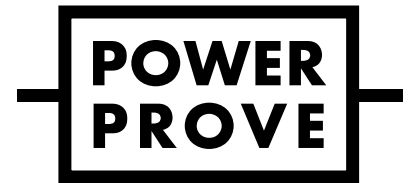
Training can be provided by the manufacturer at our headquarters or on-site, please contact our support team to find out more.

Warranty

The equipment is covered by a 12-month warranty.

AC30 Series

AC30 Load bank



Compact load bank providing 30kW of load capacity, with a highly adjustable manual control interface.

Key features

Portability

The lightweight aluminium enclosure combined with the small frame size, castors and handles make the AC30 a highly portable unit. The four 150mm diameter fans produce an evenly distributed airflow over a short distance which enables the resistor elements to be fitted closer to the fans resulting in a compact piece of equipment.

Easy to use

Simple manual control interface enables fast set-up. Analogue meters in the AC30 provide clear real-time display of the voltage, current and frequency, making it quick and easy to understand.

Phase load adjustment

Each phase of each section within the AC30 is individually switched enabling the loading on each phase to be set precisely to the required value.

1 or 3 phase

Featuring dual IEC sockets the AC30 can be loaded from a 3-phase or 1-phase AC supply at up to 30kW or 14.5kW respectively. Easily configure the load bank for the supply to be tested with a simple selector switch.

Optional extras

- **Supply cables** - made to order to the desired length and with supply side connection method to suit the intended use.
- **PVC storage cover** - available for protection during transport or storage.



Ratings

	3-phase	1-phase
Voltage, V AC	400	230
Maximum capacity, kW	30	14.5
Load step resolution, kW	1.0	0.33

Suitable for frequencies of 50Hz or 60Hz. Other voltages and frequencies available on request.

Control and ventilation

Manual controls	3 x 6 x Load section toggle switches, 1 x 1ph./off/3ph. rotary selector switch
Control interface	Manual Control (described above) 18 x Section status lamps 1 x Over-temp. status lamp 1 x Analogue volt meter 1 x Analogue frequency meter 3 x Analogue current meters (1 per phase)
Cooling	Forced convection, vertical flow (side outlets)
Fan(s)	4 x AC axial type
Control supply	230Vac 1-phase
Source	Internal, taken from supply under test

Safety

Electrical protection	Short circuit protection via MCB(s)
Thermal protection	Over-temperature thermostat trip.

Connection interfaces

Load connections	1 x 3-phase 63A IEC socket (3P+N+PE) 1 x 1-phase 63A IEC Socket (1P+N+PE)
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Operating environment

Suitable for	Indoor use only
Ambient temperature	-10°C to 50°C
Humidity	95% RH
Ingress protection	IP20

Construction

Resistor elements	Wound steel tape and expanded mesh
Element material	High grade stainless steel
Enclosure	Aluminium, painted RAL9002 grey
Portability	2x castors, 2x handles

Weight and dimensions

See general arrangement drawing reference 161473

Length, mm	560
Width, mm	400
Height, mm	840
Weight, kg	30

Testing and standards

Every unit is subjected to routine testing before dispatch, including functional operation, electrical insulation testing and visual inspection.

Declaration of conformity document reference: 161474



Documentation

Supplied with an operation and maintenance manual and routine test report as standard.

Training and support

Training can be provided by the manufacturer at our headquarters or on-site, please contact our support team to find out more.

Warranty

The equipment is covered by a 12-month warranty.

AC100 Series

AC100 Load bank



Heavy-duty, robust load bank providing 98.75kW of load capacity, with analogue power metering.

Key features

Portability

The heavy duty castors and handle make this unit easy to move close to the supply under test. In addition, the narrow width of 670mm makes it possible to pass the unit through door ways.

Easy to use

Easy connection to the supply under test using Powersafe connectors. The power connections are located to the side of the control panel so that operators can stand comfortably in front of the load bank.

Site ready

The rugged internal stainless steel frame provides a solid base on which to manoeuvre the unit on-site.

Meter points

Voltage and current banana plug test points provide an easy way to connect external metering equipment of your choice.

Optional extras

- **Supply cables** - made to order to the desired length and with supply side connection method to suit the intended use
- **Protective PVC cover** - available for additional protection during transport or storage.
- **Anchor bolt mounting plates** - available for fixed location installation.
- **Measurement leads** with plugs for voltage and current feed to external meter.



Ratings

	3 - phase	1-phase
Voltage, V AC	400	230
Frequency, Hz	50	50
Maximum capacity, kW	98.75	32.9
Load step resolution, kW	1.25	0.42

Other voltages and frequencies available on request.

Control and ventilation

Manual controls	16 x on/off push buttons for load sections and control (fan); 1 x Phase selector rotary switch for voltage measurement; 1 x Phase selector rotary switch for current measurement; Emergency stop
Control interface	Manual Control (described above) 7 x Load section lamps 1 x Control fan healthy lamp 1 x External supply source lamp 1 x Analogue Volt meter 1 x Analogue frequency meter 1 x Analogue current meter
Cooling	Forced convection, vertical orientation
Fan(s)	1x AC axial type
Control supply	230V AC 50Hz 1-phase
Source	Internal (supply under test) or external supply (automatic, when connected)

Safety

Electrical protection	Over current and short circuit fuse protection
Thermal protection	Thermostat cut-out

Connection interfaces

Load connections	4 x Powersafe sockets (3P+N) 1 x PE M12 Stud connection
External control supply	1 x C14 socket (L+N+PE)
Measurement points	2 x 4mm banana sockets for voltage measurement 2 x 4mm banana sockets for current measurement

Operating environment

Suitable for	Indoor use only
Ambient temperature	-10°C to 50°C
Humidity	95% RH
Ingress protection	IP20

Construction

Resistor elements	Wire coils (sheathed)
Element material	Stainless steel
Main enclosure	Aluminium, painted RAL 9002 grey
Internal base frame	Stainless steel, un-painted 2B finish
Portability	1 x Push/pull handle 4 x Heavy duty castors

Weight and dimensions

See general arrangement drawing reference 161475

Length, mm	1040
Width, mm	670
Height, mm	940
Weight, kg	123

Testing and standards

Every unit is subjected to routine testing before dispatch, including functional operation, electrical insulation testing and visual inspection.

Declaration of conformity document reference: 161476



Documentation

Supplied with an operation and maintenance manual and routine test report as standard.

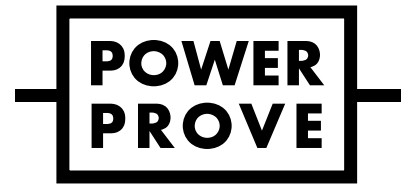
Training and support

Training can be provided by the manufacturer at our headquarters or on-site, please contact our support team to find out more.

Warranty

The equipment is covered by a 12-month warranty.

AC200 Load bank



200kW load bank with integrated touchscreen control system providing the ultimate way to verify an electrical supply.

Key features

Advanced interface

The unique Digiload control system provides detailed insight into how the supply under test responds to load changes. All test data is recorded within the system and is exported instantly in .csv format when connecting a USB flash drive. The integrated touchscreen interface can be used to manually change the load power level or setup an automated schedule of load steps. Once created, load step sequences can be saved and recalled at any time.

Quick set up

Powersafe connectors fitted to the main load terminals make connection to the supply under test simple, fast and secure. The power connections are located away from the control panel so that operators can stand comfortably in front of the load bank without tripping over cables. With power connected, the 7" intuitive touchscreen interface enables load to be applied rapidly, with real time measurements displayed immediately.

Portable

Transport to any location with integrated fork lift points. Move around on-site using heavy duty castors, which are included as standard. The optional lifting frame provides additional protection to the top of the equipment enclosure and lifting eyes for use when moving the unit with a crane. Alternatively, the design can be installed in a fixed location, when requested, the heavy duty castors are replaced with mounting brackets with holes for anchor bolts.

Robust construction

The resistor elements used are from our catalogue of highly robust industrial wire coil and stamped grid technologies using stainless steel. The construction puts the cooling airflow in direct contact with the conductor surface to maximise heat transfer, thus providing the longest possible operating life for the elements. With decades of service in industry, electricity transmission and distribution systems these element technologies provide the highest level of reliability for our product.

Optional extras

Remote Control – the Digiload remote provides the ability to control a load bank via a wired connection. It can also be used as the single point of control for a network of load banks. Housed in a rugged IP66 case it includes a 10" touch screen, emergency stop and 2 x USB data ports.

Network capability – when this hardware capability is enabled the load bank can be connected with other load banks via Modbus TCP to create a centrally controlled network.

Protective PVC cover - available for additional protection during transport or storage.

Supply cables - made to order to the desired length and with supply side connection method to suit the intended use.

Anchor bolt mounting plates - available for permanent installation. (no-cost option since supplied instead of heavy duty castors)



Voltage rating options

The AC200 is available 3 versions for the following voltage ratings:

400V 415V 480V

All versions are suitable for frequencies of 50Hz or 60Hz. Other voltages and frequencies are available on request.

Power ratings (all versions)

	3-phase	1-phase
Maximum capacity, kW	200	66.7
Load step resolution, kW	5.0	1.67

Control and ventilation

Manual controls	System on/off pushbuttons, supply rotary selector switch, emergency stop
Control interface	7" touch screen display
Cooling	Forced convection, horizontal orientation
Fan(s)	1 x 3.7kW AC fan, axial type
Noise	88dB at 1m
Control supply	3-phase AC, voltage to suit version
Source	Internal (supply under test) or external supply (recommended)

Safety

Electrical protection	Over current and short circuit fuse protection
	Over voltage protection (via control system)
Thermal protection	PT100 monitoring (load and control compartments)
	PT100 healthy status
	Airflow status

Connection interfaces

Load connections	4 x Powersafe sockets (3P + N) 1 x PE M16 Stud connection
External control supply	1 x EN 60309 3P+PE 16A
Data downloads	2 x USB Type A
Networking/Remote	2 x RJ45

Operating environment

Suitable for	Outdoor use
Ambient temperature	-10°C to 50°C
Humidity	95% RH
Ingress protection	IP23 Load enclosure IP54 Control cabinet

Construction

Resistor elements	Stamped grid and wire coils
Element material	High grade stainless steel
Base platform	Hot-dip galvanised steel
Main enclosure	Dual layer; galvanised sheet steel, painted RAL9002 grey
Portability	4 x heavy duty castors (2 x braked), fork lift pockets, optional lifting frame includes 4 x lifting eyelets

Weight and dimensions

See general arrangement drawing reference 161477

	Load bank only	with lifting frame
Length, mm	1180	1276
Width, mm	800	896
Height, mm	1353	1503
Weight, kg	240	285

Testing and standards

Every unit is subjected to routine testing before dispatch, including functional operation, electrical insulation testing and visual inspection.

Declaration of conformity document reference: 161478



Documentation

Supplied with an operation and maintenance manual and routine test report as standard.

Training and support

Training can be provided by the manufacturer at our headquarters or on-site, please contact our support team to find out more.

Warranty

The equipment is covered by a 12-month warranty.

AC300 Load bank



300kW load bank with integrated touchscreen control system providing the ultimate way to verify an electrical supply.

Key features

Advanced interface

The unique Digiload control system provides detailed insight into how the supply under test responds to load changes. All test data is recorded within the system and is exported instantly in .csv format when connecting a USB flash drive. The integrated touchscreen interface can be used to manually change the load power level or setup an automated schedule of load steps. Once created, load step sequences can be saved and recalled at any time.

Quick set up

Powersafe connectors fitted to the main load terminals make connection to the supply under test simple, fast and secure. The power connections are located away from the control panel so that operators can stand comfortably in front of the load bank without tripping over cables. With power connected, the 7" intuitive touchscreen interface enables load to be applied rapidly, with real time measurements displayed immediately.

Portable

Transport to any location with integrated fork lift points. Move around on-site using heavy duty castors, which are included as standard. The optional lifting frame provides additional protection to the top of the equipment enclosure and lifting eyes for use when moving the unit with a crane. Alternatively, the design can be installed in a fixed location, when requested, the heavy duty castors are replaced with mounting brackets with holes for anchor bolts.

Robust construction

The resistor elements used are from our catalogue of highly robust industrial wire coil and stamped grid technologies using stainless steel. The construction puts the cooling airflow in direct contact with the conductor surface to maximise heat transfer, thus providing the longest possible operating life for the elements. With decades of service in industry, electricity transmission and distribution systems these element technologies provide the highest level of reliability for our product.

Optional extras

Remote Control – the Digiload remote provides the ability to control a load bank via a wired connection. It can also be used as the single point of control for a network of load banks. Housed in a rugged IP66 case it includes a 10" touch screen, emergency stop and 2 x USB data ports.

Network capability – when this hardware capability is enabled the load bank can be connected with other load banks via Modbus TCP to create a centrally controlled network.

Protective PVC cover - available for additional protection during transport or storage.

Supply cables - made to order to the desired length and with supply side connection method to suit the intended use.

Anchor bolt mounting plates - available for permanent installation. (no-cost option since supplied instead of heavy duty castors)



Voltage rating options

The AC300 is available in 3 standard versions with the following voltage ratings:

400V 415V 480V

All versions are suitable for frequencies of 50Hz or 60Hz. Other voltages and frequencies are available on request.

Power ratings (all versions)

	3-phase	1-phase
Maximum capacity, kW	300	100
Load step resolution, kW	15.0	5.0

Control and ventilation

Manual controls	System on/off pushbuttons, supply rotary selector switch, emergency stop
Control interface	7" touch screen display
Cooling	Forced convection, horizontal orientation
Fan(s)	1 x 3.7kW fan, axial type
Noise	88dB at 1m
Control supply	3-phase AC, voltage to suit version
Source	Internal (supply under test) or external supply.

Safety

Electrical protection	Over current and short circuit fuse protection
	Over voltage protection (via control system)
Thermal protection	PT100 monitoring (load and control compartments)
	PT100 healthy status
	Airflow status

Connection interfaces

Load connections	4 x Powersafe sockets (3P+ N) 1 x PE M16 Stud connection
External control supply	1 x EN 60309 3P+PE 16A
Data downloads	2 x USB Type A
Networking/Remote	2 x RJ45

Operating environment

Suitable for	Outdoor use
Ambient temperature	-10°C to 50°C
Humidity	95% RH
Ingress protection	IP23 Load enclosure IP54 Control cabinet

Construction

Resistor elements	Stamped grid and wire coils
Element material	High grade stainless steel
Base platform	Hot-dip galvanised steel
Main enclosure	Dual layer; galvanized sheet steel, painted RAL9002 grey
Portability	4 x heavy duty castors (2 x braked), fork lift pockets, optional lifting frame includes 4 x lifting eyelets

Weight and dimensions

See general arrangement drawing reference 161479

	Load bank only	with lifting frame
Length, mm	1180	1276
Width, mm	800	896
Height, mm	1353	1503
Weight, kg	240	300

Testing and standards

Every unit is subjected to routine testing before dispatch, including functional operation, electrical insulation testing and visual inspection.

Declaration of conformity document reference: 161478



Documentation

Supplied with an operation and maintenance manual and routine test report as standard.

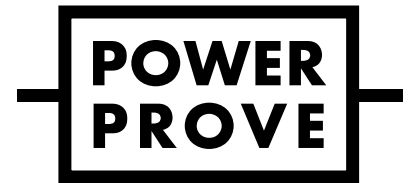
Training and support

Training can be provided by the manufacturer at our headquarters or on-site, please contact our support team to find out more.

Warranty

The equipment is covered by a 12-month warranty.

AC500 Load bank



500kW load bank with integrated touchscreen control system providing the ultimate way to verify an electrical supply.

Key features

Advanced interface

The unique Digiload control system provides detailed insight into how the supply under test responds to load changes. All test data is recorded within the system and is exported instantly in .csv format when connecting a USB flash drive. The integrated touchscreen interface can be used to manually change the load power level or setup an automated schedule of load steps. Once created, load step sequences can be saved and recalled at any time.

Quick set up

Powersafe connectors fitted to the main load terminals make connection to the supply under test simple, fast and secure. The power connections are located away from the control panel so that operators can stand comfortably in front of the load bank without tripping over cables. With power connected, the 7" intuitive touchscreen interface enables load to be applied rapidly, with real time measurements displayed immediately.

Portable

Transport to any location with integrated fork lift points. Move around on-site using heavy duty castors, which are included as standard. The optional lifting frame provides additional protection to the top of the equipment enclosure and lifting eyes for use when moving the unit with a crane. Alternatively, the design can be installed in a fixed location, when requested, the heavy duty castors are replaced with mounting brackets with holes for anchor bolts.

Robust construction

The resistor elements used are from our catalogue of highly robust industrial wire coil and stamped grid technologies using stainless steel. The construction puts the cooling airflow in direct contact with the conductor surface to maximise heat transfer, thus providing the longest possible operating life for the elements. With a decades of service in industry, electricity transmission and distribution systems the element technologies provide the highest level of reliability for our product.

Optional extras

Remote Control – the Digiload Remote provides the ability to control a load bank via a wired connection. It can also be used as the single point of control for a network of load banks. Housed in a rugged IP66 case it includes a 10" touch screen, emergency stop and 2 x USB data ports.

Network capability – when this hardware capability is enabled the load bank can be connected with other load banks via Ethernet to create a network.

Protective PVC storage cover - available for additional protection during transport or storage.

Supply cables - made to order to the desired length and with supply side connection method to suit the intended use.

Anchor bolt mounting plates - available for fixed location installation.



Voltage rating options

The AC500 is available in 3 standard versions with the following voltage ratings:

400 415 480

All versions are suitable for frequencies of 50Hz or 60Hz. Other voltages and frequencies are available on request.

Power ratings (all versions)

	3-phase	1-phase
Load step resolution, kW	25	8.33
Maximum capacity, kW	500	166.7

Control and ventilation

Manual controls	System on/off pushbuttons, supply rotary selector switch, emergency stop
Control interface	7" touch screen display
Cooling	Forced convection
Fan(s)	1 x 8.9kW AC fan, axial type
Control supply	3-phase AC, voltage to suit version
Source	Internal (supply under test) or external supply.

Safety

Electrical protection	Over current and short circuit fuse protection Over voltage protection (via control system)
Thermal protection	PT100 monitoring (load and control compartments) PT100 healthy status Airflow status

Connection interfaces

Load connections	4 x Powersafe sockets (3P +N) 1 x PE M16 Stud connection
External control supply	1 x EN 60309 3P+PE 16A
Data downloads	2 x USB Type A
Networking/Remote	2 x RJ45

Operating environment

Suitable for	Outdoor use
Ambient temperature	-10°C to 50°C
Humidity	95% RH
Ingress protection	IP23 Load enclosure IP54 Control cabinet

Construction

Resistor elements	Stamped grid and wire coils
Element material	High grade stainless steel
Base platform	Hot-dip galvanised steel
Main enclosure	Dual layer; galvanized sheet steel, painted RAL9002 grey
Portability	4 x heavy duty castors (2 x braked), fork lift pockets, optional lifting frame includes 4 x lifting eyelets

Weight and dimensions

See general arrangement drawing reference 161480

	Load bank only	with lifting frame
Length, mm	1380	1476
Width, mm	800	896
Height, mm	1353	1503
Weight, kg	310	370

Testing and standards

Every unit is subjected to routine testing before dispatch, including functional operation, electrical insulation testing and visual inspection.

Declaration of conformity document reference: 158731



Documentation

Supplied with an operation and maintenance manual and routine test report as standard.

Training and support

Training can be provided by the manufacturer at our headquarters or on-site, please contact our support team to find out more.

Warranty

The equipment is covered by a 12-month warranty.

AC1350 Load bank



1350kW load bank with integrated touchscreen control system providing the ultimate way to verify an electrical supply.

Key features

Advanced interface

The unique Digiload control system provides detailed insight into how the supply under test responds to load changes. All test data is recorded within the system and is exported instantly in .csv format when connecting a USB flash drive. The integrated touchscreen interface can be used to manually change the load power level or setup an automated schedule of load steps. Once created, load step sequences can be saved and recalled at any time.

Quick setup

Easy access to the generous cable entry compartment via a hinged, padlock-able door main load terminals make connection to the supply under test simple, and secure. The power connections can run under the control panel so that operators can stand comfortably in front of the load bank without tripping over cables. With power connected, the 10" intuitive touchscreen interface enables load to be applied rapidly, with real time measurements displayed immediately.

Modular system

Multiple 1350kW modules can be installed on a common base frame to achieve the desired total power level. The control system can be a shared common on or separate. Transport to any location with integrated fork lift points. An optional base lifting frame can be provided where 2 or more modules are required and provides lifting eyes when crane lifting is preferred.

Robust construction

The resistor elements used are from our catalogue of robust, industrial level stamped grid and flat strip technologies using high grade stainless steel. The construction puts the cooling airflow in direct contact with the conductor surface to maximise heat transfer, thus providing the longest possible operating life for the elements. With decades of service in industry, electricity transmission and distribution systems the element technologies provide the highest level of reliability for our product.

Optional extras

- **Remote Control** – the Digiload remote provides the ability to control an enabled load bank via a wired connection of up to 100m in length. It can also be used as the single point of control for a network of load banks. Housed in a rugged IP66 case (IP54 when open) it includes a 10" touch screen, emergency stop, on/off push button, and 2 x USB ports.
- **Network capability** – when this hardware capability is enabled the load bank can be connected with other load banks via Ethernet to create a network.
- **Base lifting frame** – available where 2 or more 1350kW modules are to be installed in the same location. This frame with the included lifting eyes, allows the load bank to be moved as a single, complete assembly.



Voltage ratings options

The AC1350 is available in 3 standard versions with the following voltage ratings:

400 415 480

All versions are suitable for frequencies of 50Hz or 60Hz. Other voltages and frequencies are available on request.

Power ratings

	3-phase	1-phase
Frequency, Hz	50 or 60	50 or 60
Resolution, kW	50.0	11.1
Maximum capacity, kW	1350	300

Control and ventilation

Manual controls	System on/off pushbuttons, control supply source rotary selector switch, emergency stop
Control interface	10" touch screen display
Cooling	Forced convection, vertical orientation, horizontal outlet.
Fan(s)	1 x 8.9kW AC fan, axial type
Control supply	3-phase AC, voltage to suit version
Source	Internal (supply under test) or external supply (recommended)

Connection interfaces

Load controls	12 x M12 connections (4 per phase); 4 x PE M12 Stud connection
External control supply	1 x EN 60309 3P+PE 16A
Data downloads	2 x USB Type A
Networking/ remote	2 x RJ45

Safety

Electrical protection	Over current and short circuit fuse protection; Over voltage protection (via control system)
Thermal protection	PT100 monitoring (load and control compartments); PT100 healthy status; Airflow status

Operating environment

Suitable for	Outdoor use
Ambient temperature	-10°C to 50°C
Humidity	95% RH
Ingress protection	IP23 load enclosure IP54 Control cabinet

Construction

Resistor elements	Stamped grid and flat strip
Element material	High grade stainless steel
Optional base platform	Hot dip galvanised steel
Main enclosure	Dual layer; galvanized sheet steel, painted RAL9002 grey
Exhaust air duct	Stainless steel, unpainted 2B finish
Manoeuvrability	2 x fork lift pocket channels

Weight and dimensions

See general arrangement drawing reference 161532

Length, mm	1610
Width, mm	1130
Height, mm	3175
Weight, kg	1000

Testing and standards

Every unit is subjected to routine testing before dispatch, including functional operation, electrical insulation testing and visual inspection.

Declaration of conformity document reference: 161536



Documentation

Supplied with an operation and maintenance manual and routine test report as standard.

Training and support

Training can be provided by the manufacturer at our headquarters or on-site, please contact our support team to find out more.

Warranty

The equipment is covered by a 12-month warranty.

DC70 Series

DC70 Load bank



Light weight, compact load bank providing 3kW of load capacity; 70A from a 50V source.

Key features

Portability

Lightweight enclosure, manufactured from aluminium and fitted with a carrying handle on the removable lid, which is also used for cable storage.

Easy to use

Load banks are supplied with two power cables with quick release connectors. Included with the unit is one set of (2 x) 25mm² cable, 2.4m long with M10 lugs for supply side connection.

Precise control

6 switched load steps including a fully variable section provide a load bank with precise control.

Current measurement

Fitted with a DC shunt for accurate current monitoring, the DC70 provides 2 banana plugs for connection to an external display and/or logging system.

Optional extras

- **Additional supply cables** – available in 5m lengths as standard or made to custom length if requested, with supply side connection method to suit the intended use.
- **Protective PVC cover** - available for protection during transport or storage.



Ratings

Voltage, V DC	50
Maximum capacity, kW	3
Current range, A	0.6 to 70

Control and ventilation

Manual controls	6 x Load section toggle switch 1 x Rheostat variable section control
Control interface	Manual controls (described above) 1 x Current shunt with 100A/100mV ratio
Cooling	Forced convection, horizontal cooling
Fan(s)	2 x DC axial type
Control supply	48V DC
Source	Internal, taken from supply under test

Connection interfaces

Load controls	2 x Quick release connectors (1 cable set included)
Measurement connections	2 x 4mm Banana sockets

Safety

Electrical protection	Over current and short circuit fuse protection
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Operating environment

Suitable for	Indoor use only
Ambient temperature	-10°C to 50°C
Humidity	95% RH
Ingress protection	IP20

Construction

Resistor elements	Wound steel tape
Element material	High grade stainless steel
Enclosure	Aluminium; painted RAL9002 grey
Portability	1 x protective lid with integrated carry handle

Weight and dimensions

See general arrangement drawing reference 161509

Length, mm	400
Width, mm	200
Height, mm	500
Weight, kg	10

Testing and standards

Every unit is subjected to routine testing before dispatch, including functional operation, electrical insulation testing and visual inspection.

Declaration of conformity document reference: 161510



Documentation

Supplied with an operation and maintenance manual and routine test report as standard.

Training and support

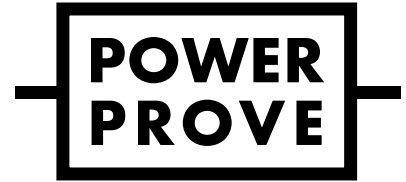
Training can be provided by the manufacturer at our headquarters or on-site, please contact our support team to find out more.

Warranty

The equipment is covered by a 12-month warranty.

DC110 Series

DC110 Load bank



Light weight, compact load bank providing 3kW of load capacity; 120A from a 28V source.

Key features

Portability

Lightweight enclosure manufactured from aluminium and fitted with a carrying handle on the removable lid, which is also used for cable storage.

Easy to use

Load banks are supplied with two power cables with quick release connectors. Included with the unit is one set of (2 x) 25mm² cable, 2.4m long with M10 lugs for supply side connection.

Precise control

6 switched load steps including a fully variable section provide a load bank with precise control.

Current measurement

Fitted with a DC shunt for accurate current monitoring, the DC110 provides 2 banana plugs for connection to an external display and/or logging system.

Optional extras

- **Additional supply cables** – available in 5m lengths as standard or made to custom length if requested, with supply side connection method to suit the intended use.
- **Protective PVC cover** - available for protection during transport or storage.



Ratings

Voltage, V DC	28
Maximum capacity, kW	3.36
Current range, A	0.6 to 120

Control and ventilation

Manual controls	6 x Load section toggle switch 1 x Rheostat variable section control
Control interface	Manual controls (described above) 1 x Current shunt with 100A/100mV ratio
Cooling	Forced convection, horizontal orientation
Fan(s)	2 x DC axial type
Control supply	24V DC
Source	Internal, taken from supply under test

Connection interfaces

Load controls	2 x Quick release connectors (1 cable set included)
Measurement connections	2 x 4mm Banana sockets

Safety

Electrical protection	Over current and short circuit fuse protection
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Operating environment

Suitable for	Indoor use only
Ambient temperature	-10°C to 50°C
Humidity	95% RH
Ingress protection	IP20

Construction

Resistor elements	Wound steel tape
Element material	High grade stainless steel
Enclosure	Aluminium; painted RAL9002 grey
Portability	1 x protective lid with integrated carry handle

Weight and dimensions

See general arrangement drawing reference 161509	
Length, mm	400
Width, mm	200
Height, mm	500
Weight, kg	10

Testing and standards

Every unit is subjected to routine testing before dispatch, including functional operation, electrical insulation testing and visual inspection.

Declaration of conformity document reference: 161510



Documentation

Supplied with an operation and maintenance manual and routine test report as standard.

Training and support

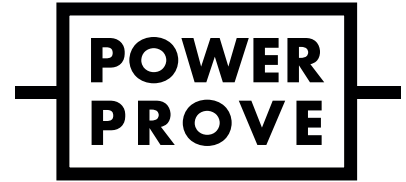
Training can be provided by the manufacturer at our headquarters or on-site, please contact our support team to find out more.

Warranty

The equipment is covered by a 12-month warranty.

DC220 Series

DC220 Load bank



Light weight, compact load bank providing 10.5kW of load capacity; 210A from a 50V source.

Key features

Portability

Lightweight enclosure manufactured from aluminium and fitted with a carrying handle.

Easy to use

Load banks are supplied with two power cables with quick release connectors. Included with the unit is one set of (2 x) 50mm² cable, 2.5m long with M12 lugs for supply side connection.

Precise control

9 switched load steps including a fully variable section provide a load bank with precise control from 0.6A to 5A.

Current measurement

Fitted with a shunt resistor for accurate current measurement capability, the DC220 provides 2 banana plugs for connection to an external display and/or logging system.

Optional extras

- **Additional supply cables** – available in 5m lengths as standard or made to custom length if requested, with supply side connection method to suit the intended use.
- **Protective PVC cover** - available for protection during transport or storage.



Ratings

Voltage, V DC	50
Maximum capacity, kW	10.5
Current range, A	0.6 to 210

Control and ventilation

Manual controls	9 x Load section toggle switch 1 x Rheostat variable section control
Control interface	Manual controls (described above) 1 x Current shunt with 100A/100mV ratio 1 x Audible over-temperature alarm
Cooling	Forced convection, horizontal orientation
Fan(s)	2 x DC axial type
Control supply	48V DC
Source	Internal, taken from supply under test

Connection interfaces

Load controls	2 x Quick release connectors (1 cable set included)
Measurement connections	2 x 4mm Banana sockets

Safety

Electrical protection	Over current and short circuit fuse protection
Thermal Alarm	Over temperature alarm buzzer

Operating environment

Suitable for	Indoor use only
Ambient temperature	-10°C to 50°C
Humidity	95% RH
Ingress protection	IP20

Construction

Resistor elements	Wound steel tape
Element material	High grade stainless steel
Enclosure	Aluminium; painted RAL9002 grey
Portability	1 x integrated carry handle

Weight and dimensions

See general arrangement drawing reference 161509	
Length, mm	540
Width, mm	310
Height, mm	500
Weight, kg	17

Testing and standards

Every unit is subjected to routine testing before dispatch, including functional operation, electrical insulation testing and visual inspection.

Declaration of conformity document reference: 161510



Documentation

Supplied with an operation and maintenance manual and routine test report as standard.

Training and support

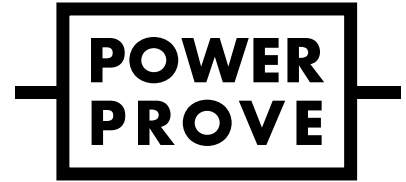
Training can be provided by the manufacturer at our headquarters or on-site, please contact our support team to find out more.

Warranty

The equipment is covered by a 12-month warranty.

DC600 Series

DC600 Load bank



Light weight, compact load bank providing 30kW of load capacity; 600A from a 50V source.

Key features

Portability

Lightweight enclosure manufactured from aluminium and fitted with two handles on the top of the enclosure and two fixed position castors for manoeuvrability.

Easy to use

Load banks are supplied with two power cables with quick release connectors. Included with the unit is one set of (2 x) 2x70mm² cable, 2.5m long with M10 lugs for supply side connection.

Precise control

10 switched load steps including a 5A fully variable section give the load bank precise control from 0.6A to 600A.

Current measurement

The control circuit can be supplied from an external source. When this is done the load bank can be used to test DC supplies with any output voltage from 1V to 50V, with the current drawn proportional according to Ohm's law.

Optional extras

- **Additional supply cables** – available in 5m lengths as standard or made to custom length if requested, with supply side connection method to suit the intended use.
- **Protective PVC cover** - available for protection during transport or storage.



Ratings

Voltage, V DC	50
Maximum capacity, kW	30
Current range, A	0.6 to 600

Control and ventilation

Manual controls	10 x on/off push buttons (load sections and control) 7 x Load section toggle switch 1 x Rheostat variable section control
Control interface	Manual controls (described above) 5 x load section and control indicator lamps
Cooling	Forced convection, horizontal orientation
Fan(s)	2 x DC axial type
Control supply	48V DC
Source	Internal (supply under test) or external supply (automatic, when connected)

Connection interfaces

Load controls	2 x load connection sockets (1 cable set included)
External control supply	1 x connection socket

Safety

Electrical protection	Over current and short circuit fuse protection
Thermal protection	Over temperature thermostat cut out

Operating environment

Suitable for	Indoor use only
Ambient temperature	-10°C to 50°C
Humidity	95% RH
Ingress protection	IP20

Construction

Resistor elements	Expanded mesh and wound steel tape
Element material	High grade stainless steel
Enclosure	Aluminium; painted RAL9002 grey
Portability	2 x integrated handles, 2 x fixed position castors

Weight and dimensions

See general arrangement drawing reference 161509	
Length, mm	560
Width, mm	400
Height, mm	840
Weight, kg	40

Testing and standards

Every unit is subjected to routine testing before dispatch, including functional operation, electrical insulation testing and visual inspection.

Declaration of conformity document reference: 161514



Documentation

Supplied with an operation and maintenance manual and routine test report as standard.

Training and support

Training can be provided by the manufacturer at our headquarters or on-site, please contact our support team to find out more.

Warranty

The equipment is covered by a 12-month warranty.

Digiload is a complete load bank control system giving you unparalleled control and test data at your finger tips.

The system gives you -

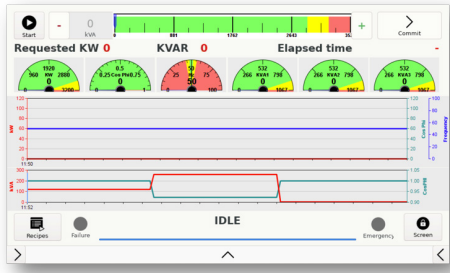
- Unrivalled processing power
- Touch screen interface
- Rugged remote control (option)
- Ability to network and control up to 20 load banks simultaneously
- Data logging with automatic downloads via USB
- Load profile memory function for repeat tests
- Precision power measurement
- A remote diagnostic and repair support service
- Future proof technology



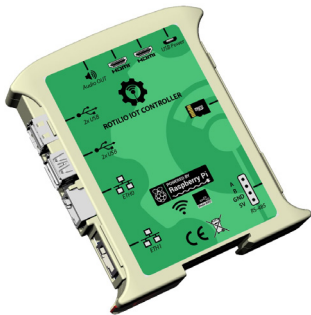
Quick and easy to set up, the digiload system aims to speed up the testing process, giving you accurate data that can be stored and accessed whenever you need it.

Cloud based connectivity makes it the most flexible system on the market, making user control, servicing and support a breeze.

Detail



Interface



Processor



Remote control

Processing power

Digiload is the most powerful load bank control system on the market. Utilising a single-board computer, complete with quad core 1.5Ghz processor and 2Gb of LPDDR4 SD RAM you can be sure that our system will process and present your data at high speed.

User control

Digiload offers you three user control options - local touchscreen and remote via dedicated controller or users own PC. Each load bank with Digiload is supplied with a touch screen ; available as either a 7" or 10" size. The remote control is IP66 to protect it from what the world (and you) can throw at it. The remote connection is made over an Ethernet so you can connect to your load bank via your own PC or building management system.

Networking capability

The digiload system enables you to create a network of up to 20 load banks connected via ethernet cable. Networking load banks means tests can be run simultaneously from a single point of control saving significant set-up time.

Remote diagnostics and repairs

We can connect to the digiload system from our headquarters using the Gigabit Ethernet port or optional cellular 4G data connection module and quickly, provide remote support to your service team wherever you are in the world.

Load profile memory

Digiload offers you the opportunity to input your own pre-configured load step sequences so you can quickly and easily run repetitive tests. There is no limit to the number of sequences you can save. Useful for portable load banks, where you can bring the load bank to the generator and immediately run the required test without wasting both time, with repetitive set-ups, and fuel by testing longer than necessary.

Power measurement

Digiload measures - Voltage Vrms, Current Irms, Power kW and in addition for AC: Apparent Power kVA, Reactive power kVAR, power factor cos ϕ . Measurements are sampled 6400 times per second and the data is displayed on-screen in real-time.

Data logging

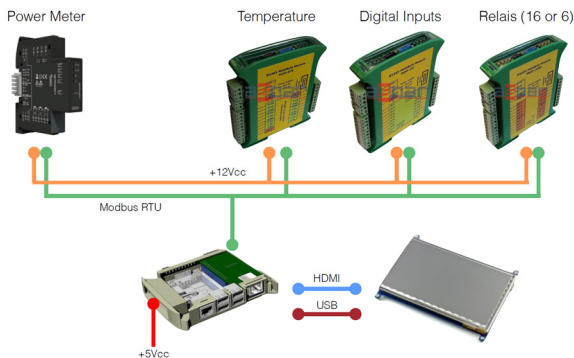
Test records are automatically downloaded onto one USB stick in a .csv format making it quicker and easier for you to interpret what is going on. All data including the power measurements, alarm states, air temperatures are recorded to the internal memory card at a default rate of 1 sample per second. High efficient data storage means Digiload can store 900 days worth of test data and still have room to spare.

Future proof

The Digiload software platform can be upgraded and updated over time. Simply connect the load bank to a network with Ethernet cable, or the optional 4G modem and request the update from our support team.

Technical specifications

System architecture



Core computer

Processor	Quad core 1.5GHz CPU
Memory	2GB LPDDR4 SDRAM
Storage	32GB industrial grade micro-SD card
Connectivity	2 x Ethernet 2 x USB 3.0 1 x RS-485
Time sync	Real-time clock
Vibration + shock	IEC 61131-2

Input/output modules

General purpose modules	16 x relay outputs (4 common rails) 6 x fully independent relay outputs 8 x Digital input + 8 relay outputs 16 x Digital inputs
Sensor input module	6 x Analogue temperature inputs
Communications	RS-485
Communication protocol	Modbus RTU

User interface

Display	Touch sensitive (capacitive type) IPS display
Display sizes	7" or 10"

Power measurement

Options	3-phase AC, 1-phase AC or DC
Measurements AC + DC	Voltage V, Current A, Power kW
Measurements AC only	Apparent power kVA, Reactive power kVAR, Power factor cos
Accuracy class IEC 62053-11	0.5 as standard (other options available)

Remote control (option)

User interface	10" Touch sensitive IPS display 1 x Power push button 1 x Emergency stop
Connectivity	2 x USB 3.0 1 x RJ45 1 x power connector
Communications protocol	Modbus TCP
Ingress protection IEC 60529	IP66 (closed) IP54 (open)

Cellular connection (option)

Connectivity	4G/LTE (Cat 4), 3G, 2G
SIM	1 x Small form factor SIM
Antenna connection	2 x SMA
System connection	10/100 Ethernet (Modbus TCP)
Communication protocol	Modbus TCP

DUAL30 Series

DUAL30 Load bank



Designed to test a wide range of electrical supplies from batteries to uninterruptible power supplies (UPS) and standby generators.

Key features

Testing flexibility

The ability to test power sources producing either AC or DC with the same unit makes the DUAL30 a very adaptable piece of test equipment. Test at 120V or 240V either 1-phase AC or DC.

Portability

The four heavy duty castors, three handles and a compact form factor make this unit easy to move close to the supply under inspection. In addition, the width of just 500mm makes it easy to move the unit through building doorways.

Quick setup

Easy connection to the supply under test using bolted stud connections. The power connections are located to the back of the control panel so that operators can stand comfortably in front of the load bank without tripping over cables.

Power measurement

The DUAL30 includes analogue voltmeter and ammeter, providing easy to read real-time measurements. In addition, panel mounted banana sockets permit external logging of current.

Optional extras

- **Supply cables** - made to order to the desired length and with supply side connection method to suit the intended use.
- **Protective PVC cover** - available for additional protection during transport or storage
- **Measurement leads** - with 4mm banana plugs for voltage and current feed to external meter.



Ratings

	1-phase AC	DC
Voltage, V AC	120 or 240	120 or 240
Frequency, Hz	50 or 60	n/a
Load step resolution, kW	0.5	0.5
Maximum capacity, kW	31.5	31.5

Control and ventilation

Manual controls	12 x on/off push buttons for load sections, 1 x link bar to select 120V or 240V operation
Control interface	Manual Control (described above) 6 x load section lamps 1 x control fan healthy lamp 1 x analogue voltmeter 1 x analogue ammeter
Cooling	Forced convection, horizontal orientation
Fan(s)	1 x AC axial type
Control supply	110V AC 1-phase
Source	Internal (supply under test) or external supply (automatic, when connected)

Connection interfaces

Load controls	4 x M16 brass threaded studs (1P/+, 2 x voltage-link, N/-)
External control supply	1 x C14 socket for 230V AC (L+N+PE) 1 x socket for 110V AC (L+N+PE)
Measurement points	2 x panel mounted 4mm banana sockets for external current measurement

Safety

Thermal protection	Over temperature thermostat cut-out
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Operating environment

Suitable for	Indoor use only
Ambient temperature	-10°C to 50°C
Humidity	95% RH
Ingress protection	IP20

Construction

Resistor elements	Expanded mesh and wound steel tape
Element material	High grade stainless steel
Enclosure	Aluminium; painted RAL9002 grey
Portability	3 x handles 4 x castor wheels

Weight and dimensions

See general arrangement drawing reference 161509

Length, mm	600
Width, mm	500
Height, mm	800
Weight, kg	50

Testing and standards

Every unit is subjected to routine testing before dispatch, including functional operation, electrical insulation testing and visual inspection.

Declaration of conformity document reference: 161516



Documentation

Supplied with an operation and maintenance manual and routine test report as standard.

Training and support

Training can be provided by the manufacturer at our headquarters or on-site, please contact our support team to find out more.

Warranty

The equipment is covered by a 12-month warranty.