

HV JUICE

Gildemeister Energy Storage Solutions

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GILDEMEISTER
energy solutions



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100% NEW ZEALAND
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Micro & Terra Ohm Testers by Metrel

www.transnet.co.nz





Intelligent integrated storage systems based on vanadium redox flow technology.

The CellCube energy storage system is regarded as a milestone in the history of regenerative energy management. Whether in combination with photovoltaic, wind power stations, biogas generators or in parallel grid operation – the vanadium redox flow energy storage system guarantees uninterrupted power supply. It is independent of weather fluctuations, temperatures, length of day or unstable grids.

The CellCube energy storage system solves the problem of energy storage. It presents uninterrupted supply of power from solar and wind power stations, also during periods of darkness or without wind. Therefore CellCube is the missing link for supporting the development of renewable energy.

TRANSPORT



INSTALLATION



COMBINATION



APPLICATION



The CellCube energy storage system allows a clean, emission-free and quick provision of power, can be charged very quickly and is ready for use immediately. It distinguishes itself through high safety, storage stability and very fast reaction times and can be incorporated into existing energy systems worldwide in numerous application fields. Best service, absolute safety and reliability! Sophisticated technology, proven components, intelligent sensors and control functions ensure that the CellCube is absolutely low-maintenance. With the flow energy storage system controller a clever monitoring instrument provides comprehensive control and guarantees safe provision of power around the clock.

Modular and flexible for every situation

CellCube, the individual energy storage system adapts to every requirement. The system power output and capacity is scalable from the kilowatt range to the megawatt range without a problem.

The modular and flexible structure of the system allows varied application options - conceptualised according to requirements, depending on customer preferences.

CellCube - for a stable supply of power

The low-maintenance redox flow energy storage system with its long service life, based on vanadium, guarantees uninterrupted power supply, fed by solar, wind power stations, Diesel or as part of the grid. In its weather-proof housing the CellCube can be used immediately worldwide. Clean power around the clock.

CellCube application fields

- **Grid support:** For the stabilisation of low voltage and medium voltage grids; as energy reserve; for smoothing out peaks (compensation of load & generation peaks)
- **Backup:** Use as inline UPS with frequency and amplitude decoupling; leading edge system safety
- **Wind and solar parks:** As buffer to smooth energy output and to compensate for fluctuations; higher contract security due to energy reserves in times of reduced power
- **Re-powering:** Investment protection - CellCube ensures constant supply, even after amortisation of the wind or solar park

100 Units in Service
2,000,000 Hours of Operation
20 years + Service Life

green energy

long service life, low maintenance, turnkey, ready for use



CellCube Features:

- High safety, non-flammable, non-explosive
- Practically unlimited cycling
- Scalable up into the MW-range through simple parallel connection of multiple units
- CellCube is 100 % capable of deep discharge
- Turnkey energy storage in weatherproof and securely protected housing
- Up to 80 % efficiency
- Holistic system solution, including specially coordinated inverters, thereby allowing connection to different energy sources
- Remote or online maintenance is possible
- Central temperature management
- Optimal operational characteristics through intelligent battery management
- Standard freight containers allow simple and cost-effective transport
- Vanadium is environmentally friendly and recyclable
- Spontaneous reaction to load demand

complete
with Enclosure
plug & play
scalable



100%
capable of deep discharge,
unlimited cycling, non
flammable, lead/
cadmium/mercury
free



TAILOR-MADE FROM kW TO MW

CellCube - The modular solution for every application.

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	Power Output (kW)	Storage Capacity (kWh)				CellCube Style
CellCube FB 10	10	40	70	100	130	
CellCube FB 20	20	40	70	100	130	
CellCube FB 30	30	40	70	100	130	
CellCube FB 200	200	-	400	800	1600	



MI3200 - TERAOHM 10KV INSULATION TESTER

TeraOhm 10 kV is a professional high voltage insulation tester with added diagnostics tools. It is specially well suited for:

- Power transformers
- Measuring transducers in distribution networks
- Testing insulation resistance of rotating machinery and cables
- Production line periodic testing and maintenance
- Troubleshooting and analysis of all kinds of insulation problems

Because of its robustness (CAT IV) it is best suited for industrial environment.

MAIN FEATURES:

- Insulation resistance up to 10 TΩ
- Diagnostics tools (PI, DAR, DD)
- Step voltage insulation test
- Test voltage from 500 V up to 10 kV DC, adjustable in 25 V steps
- Maximum charging current is 5 mA
- Automatic discharge of capacitive loads
- Digital and bar graph results with date and time
- Optional PC software HVLink PRO for downloading/analysing & test report printing
- RS232 and USB isolated communication ports
- High quality accessories including shielded test leads included
- High EM interferences protection
- CAT IV / 600 V
- Mains and rechargeable battery power supply

STANDARDS:

- Instruments operation: IEC/EN61557-2
- Electromagnetic compatibility: EN 61326 class B
- Safety: EN 61010-1 (instrument)
EN 61010-031(accessories)



MI3242 - MICROOHM 2A LOW RESISTANCE OHMMETER

MI 3242 MicroOhm 2A is a portable low resistance ohmmeter used to measure low resistances of:

- switches, relays, connectors, bus bars, power distribution cable joints, motor & generator winding, power transformers, power inductors, rail track joints, wire and cable resistance, welding joints for industrial application, etc., with test current up to 2A.

MEASURING FUNCTIONS:

- Bidirectional resistance measurement from 1 $\mu\Omega$ up to 199,9 Ω with test current up to 2 A

STANDARDS:

- Electromagnetic compatibility: EN 61326 Class A
- Safety (LVD): EN 61010-1, EN 61010-031, EN 61010-2-30





MI3201 - TERAOHM 5KV PLUS INSULATION TESTER



The new TeraOhm 5 kV Plus insulation tester has all necessary features for a profound insulation diagnostics. Automated calculation of PI, DD and DAR, combined with a possibility to perform a step voltage test make the instrument suitable for the most demanding customers and applications.

Large LCD display allows real time R(t) graphs to be displayed. Windows compatible HVLink PRO PC Software and either RS232 or USB communications ports serve for connecting the instrument to the PC and management of the recorded test data.

FEATURES

- Diagnostic tools - All parameters can be measured and displayed in one single measurement.
 - Step voltage test
 - R(t) graph - Real time resistance against time graph plotting facility
 - High charging capacity
 - High EM (noise) immunity - Built in noise rejection filters and shielded test leads supplied
 - High protection level - CAT IV / 600 V over-voltage category for industrial environments.
- Lightweight and user-friendly design - Packed in a handy, rugged carrying case weighing only 3 kg.



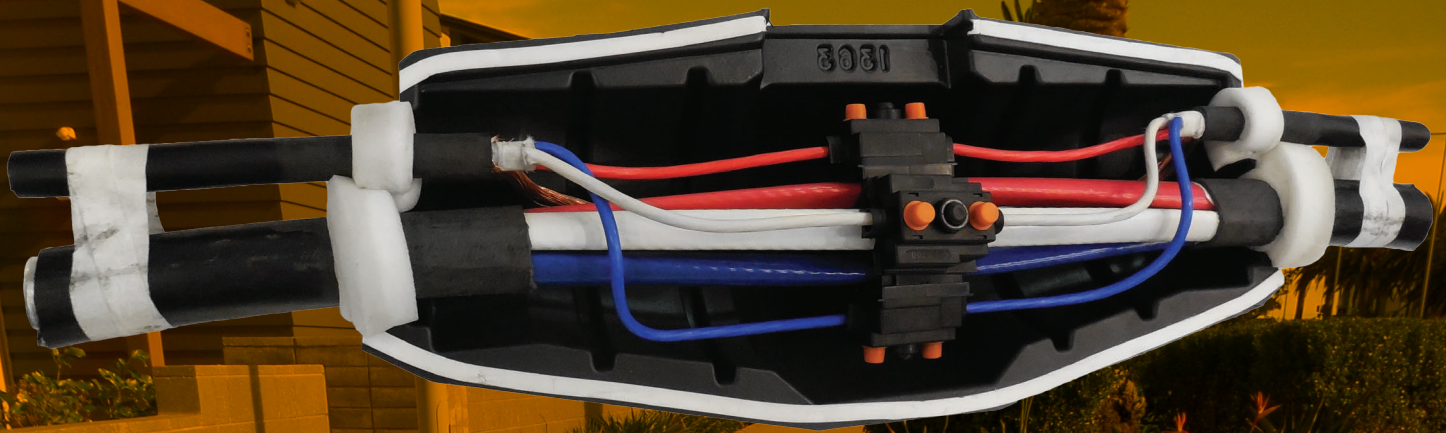
STANDARDS:

- Instruments operation: IEC/EN61557-2
- Electromagnetic compatibility: EN 61326 class B
- Safety: EN 61010-1 (instrument), EN 61010-031 (accessories)

KEY FEATURES:

- High over-voltage protection (CAT III/600V) allows use in substations & other points with low line resistance.
- Internal protection circuit protects user and instrument from inadvertent connection to lines.
- 50 Hz / 60 Hz ripple detection and rejection.
- Internal battery powers more than 800 measurements of 500mΩ load ∞ 2A test current & 15s duration.
- Preprogrammed limits with PASS/FAIL evaluation of test result & bright GREEN/RED visual indicators.
- Large 128 x 64 dots matrix display with back light offers easy to read results and all associated parameters.
- Lightweight portable design.
- Up to 1500 test results with timestamp can be stored in internal memory.
- PC SW HVLink PRO enables downloading, review, analyses and printing of test results.





LVSBS - Faster & Safer for Live Working!
Designed with worker safety as the priority.

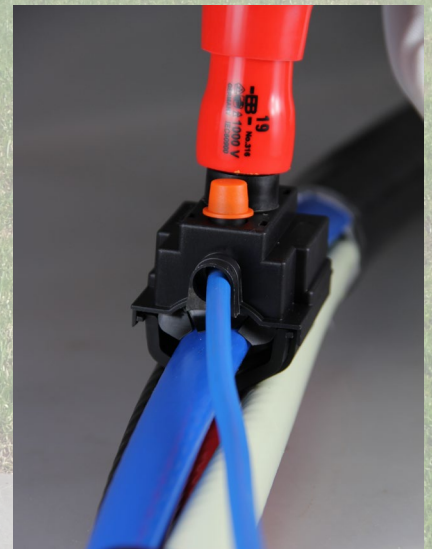


FEATURES

- Fast, safe and simple to apply
- Each phase is connected independently of the others to ensure worker safety
- Fully shrouded connector body removes risk of accidental contact
- No exposed metal work during installation
- Shear head bolts - no need for torque tools
- IPC - guarantees connection integrity (when installed to manufacturers instructions)
- Insulated drive mechanism detaches at set torque when installation is complete
- Range taking connector accepts CU & AL cable
- Two part resin offers mechanical protection to the joint
- Two entry ports for service cables
- Can be installed under load - safer working
- No need to strip the main conductor
- Made to requirements of IEC 61238-1
- Mechanical protection of joint provided by use of two part resin

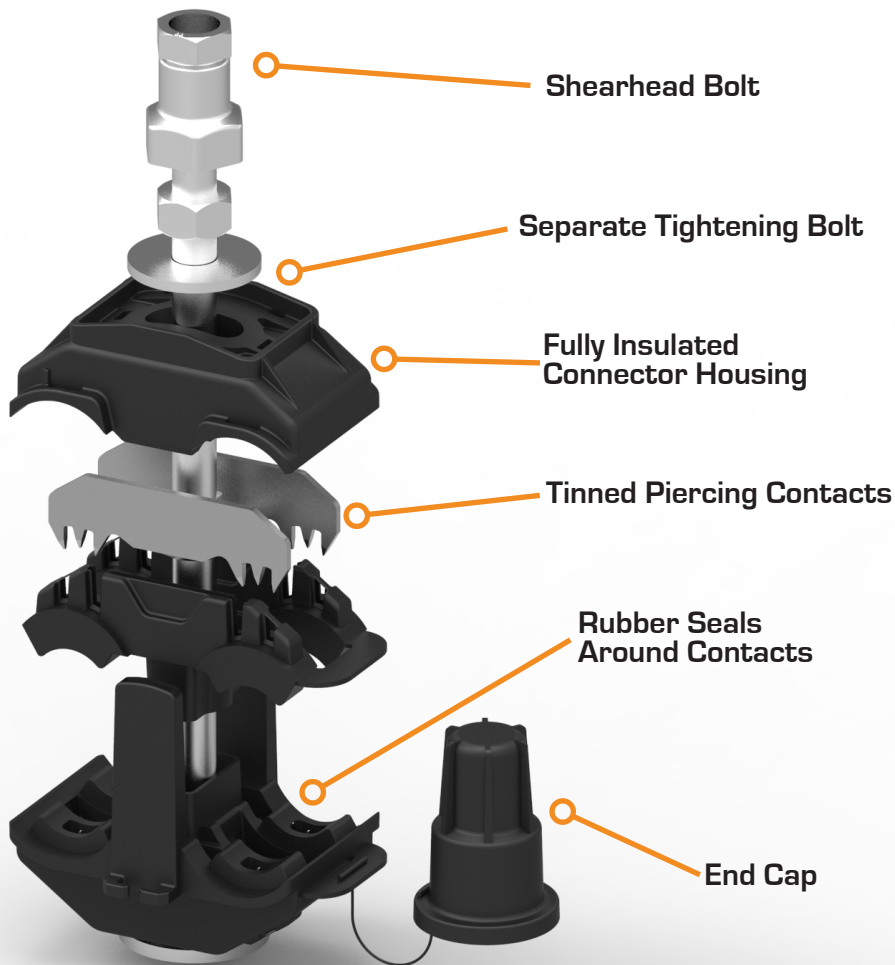
KITSETS

- Three kits cover main cable 70mm² - 300mm²
- Up to two tails of 10mm² - 35mm² from each phase





INSULATION PIERCING TECHNOLOGY HAS BEEN AROUND SINCE THE 1970'S....AND IT'S COME A LONG WAY SINCE THEN!



Insulation Piercing Technology, like other connector technologies have a specific place where they shine above all others. IPC's are a very technologically advanced connector, they use a number of small contact points at a high pressure to ensure an exceptionally good electrical connection.

IPC technology has been around since the 1970's when the revamped insulated cables really started to take off. The connectors have come a long way since their inception, they were initially just a standard connector with large contact areas – similar to standard connectors of the time.

Over the years, IPC technology has developed and tested to ensure it can accommodate heat cycling, climatic ageing, electrical resistance, water resistance and dielectric resistance. The modern IPC's you'll find on networks throughout New Zealand and the world incorporate all these advancements and also incorporate a range of added safety features.

INSULATION PIERCING TECHNOLOGY



SAFETY FEATURES:

- Safe to install on live circuits (as long as manufacturers guidelines are adhered to)
- Tightening bolt separate to piercing contacts remains permanently de-energised
- Cable doesn't need to be stripped, protecting workers from exposed live cables
- Fully insulated housing for worker safety

PRODUCT FEATURES:

- Shearhead bolts ensure correct connection pressure everytime
- Range taking capabilities reduce the inventory requirements
- Connectors accept both Al and Cu cable (unless specified)
- By not stripping the cable, contact teeth can make contact with cable before oxidation takes place
- Completely seals around contact points for watertight connection
- All connectors come with contact grease



EVERY CONNECTION COUNTS

Salisbury Rubber Insulating Gloves

Exceed IEC EN60903 Standard



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Salisbury by Honeywell is a world leader in the manufacture and distribution of personal electrical safety products, they have been setting industry standards since 1855. No matter where you are or what you need, there is a Salisbury product available.

Rubber insulating gloves are among the most important articles of personal protection for electrical workers. Incorporating high dielectric and physical strength, flexibility and durability, Salisbury rubber insulating gloves have earned the reputation for superior performance - meeting and exceeding the requirements of current ASTM D120 specifications and IEC EN60903 standards.

TransNet stock a large range of Salisbury gloves and other accessories, in all classes. We also have overgloves, mats, sleeves, cleaners and storage bags available exstock. If required, your gloves etc. can be sent to an independent test agency to be tested before they are shipped to you.

For all your glove needs, contact our customer service team today!



SALISBURY
by Honeywell

Merry Christmas

We would like to take this opportunity to thank you for your custom, it's been a great year and we look forward to doing it all again in 2016.

We wish you and your family a happy, safe festive season and a relaxing holiday.

As always we will be open on all business days however PLEASE NOTE that courier deliveries will be reduced over the holidays, so please plan accordingly.

The Team at TransNet

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