

# **HV JUICE**

# CellCube GREEN ENERGY STORAGE

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# **RAYCHEM - THE INVENTORS OF HEATSHRINK**





# **CELLCUBE - GREEN ENERGY STORAGE**



# The Clean Way to Store Energy

Energy storage has long been the Achilles heel for green energy. CellCube by Gildemeister is an Intelligent Integrated Storage system using Redox Flow Technology. Vanadium redox flow technology is stable and recyclable – giving it an edge over other storage system technologies, simply because it's safer. At the end of the units useful life you can simply rejuvenate it and continue to use it or you can sell the electrolytes back to Gildemeister who will rejuvenate and reuse without any negative effects on the environment - it's a win, win for all.

### **FEATURES**

- Modular & flexible for every situation
- A stable supply of electricity
- High safety, non-flammable, non-explosive
- Unlimited cycling
- 100% deep discharge capable
- Simple & cost effective to freight
- More than 130 units in service worldwide with more than 2,000,000 hours of operation
- Scalable for any use up to mW range
- Low maintenance, long service life, recyclable

# **HOW IT WORKS**

- Liquid electrolyte from the positive and negative tanks is pumped through the electro-chemical cells (stacks)
- An electrochemical reaction occurs in the stacks, storing or releasing energy
- Electrical energy is converted, controlled, and delivered via the bi-directional inverters to the grid





World Heritage Site Approved



Non-Flammable Non-Explosive



No Noise Operation



Recyclable- No Contaminants

GILDEMEISTER

energy solutions

# **RAYCHEM RSTI ELBOW SENSOR SETS**



# POWERING TOMORROW WITH SENSOR TECHNOLOGY FOR SWITCHGEAR CONNECT

TE Connectivity (TE) helps customers powering tomorrow's networks by adding to its complete portfolio of switchgear advanced technology a sensor set for intelligent grid applications.

Sensors play a strategic role in power networks by allowing the online monitoring of power lines,

transformers and substation equipments which helps prevent failure and ensures high performance.

The unique design of TE's separable connectors make it possible to combine them with different sensor types for optimised smart grid solutions.

TE provides sensor technology for Medium Voltage Separable Connectors that enables to:

- Monitor network conditions
- Notify changes in operational conditions
- Measure signal for control tasks
- Optimize the management of decentralized power networks
- Install them easily in new and retrofit applications

Resistive sensors for regulation of power quality: The High Accuracy class of these senosrs allows for the remote measuring and signaling required for control tasks.



# **KEY FEATURES**

- Accurate transformer status voltage measurement enabling great status evaluation
- Compact design using shortened cone for asymmetric T-connectors
- Easy installation and integration into the grid
- Earth fault detection in combination with current

Capacitive sensors for continuous monitoring:

The sensors, when used in conjunction with the existing Switchgear Connects test points, allow for Indication and visualisation applications.

# **KEY FEATURES**

- No maintenance required
- Easy smart grid interface
- adjustable capacitance module to suit different systems

# PRODUCT INFORMATION

Voltage Factor	Accuracy Class	Rated Secondary Voltage
1.2 UN and 1.9 UN 8h	0.5/1/3	3.25/√3 V or customer defined



# **ECOPILLAR EPLP3 LINK PILLAR**



The versatile ECOPillar link pillar is robust and safe, with no bare live parts this unit enhances worker safety as well as offering a user friendly platform for switchgear.

### **FEATURES**

- Designed for connecting low voltage distribution cables to other cables or to the secondary winding of a distribution transformer in a 400V, 50Hz LV circuit
- · These pillars can be used as link, junction or service pillars
- Made of UV Stable repurposed Rotathene 6329
- Base structure is galvanised steel
- Copper busbar
- No bare live parts plastic panel with sealing plugs encapsulates busbar
- Lid secured with torx security screws
- Customisable lid details specific to your network













Can be supplied empty or with switchgear configuration of your choice (not limited to those listed, any switchgear included incurs additional cost):

- 1x250 Amp DIN + 4x160 Amp DIN
- 1x630 Amp DIN + 1x630 Amp DIN + 1x250 Amp DIN
- 1x630 Amp DIN + 4x160 Amp DIN
- 1x400 Amp DIN + 4x160 Amp DIN
- 2x250 Amp DIN + 2x160 Amp DIN

- 3x630 Amp DIN
- 3x400 Amp DIN
- 3x250 Amp DIN
- Available complete as Tappat 3 way link pillar (see below for details)

# **TAPPAT 3 Way Link Pillar**

EPLP3 accommodates the Tappat 3 way link pillar components for a complete turnkey solution.

# FEATURES AND BENEFITS:

- Touch safe no bare live parts, completely encased copper bus for safety
- Maximum flexibility & control of your LV network, aids quick easy fault finding
- Capacity to house additional service fuses for street lights or customers
- Functional link & isolation capacity allowing minimal outage minutes during fault conditions
- 185mm2 to 300mm2 mains & up to 50mm2 service connections
- Tinned Brass connecitons eliminate possibility of corrosion
- Tested to 600 AMPS





# TEST & MEASUREMENT - CABLE LOCATOR



# **VSCAN FEATURES**

- Compass (line direction indicator)
- Self-test and calibration verification
- Data logging & data management software
- Configuration utility personalise your vScan
- Bluetooth & GPS options
- Metal detection (TNVSCANM-KIT only)

Removable loudspeaker - output limited to HSE safety levels

Peak level indicator

Compass (line direction indicator)

High contrast display with backlight

Push buttons on/off and menu activation





Vibrate alert

Internal loudspeaker

Rotary gain/sensitivity control

Paddle - navigation/select

Rugged ABS housing with protective bumpers

Battery housing for alkaline or Lithium ion battery packs

USB socket - programming/data transfer

# RANSMITT

Output status lights

Speaker volume control



Switch - pulse/continuous output

Output level select



Active modes 33Hz & 131kHz

Sonde mode (33Hz)

Metal locate mode (vScanM



# CAT NO. #TNVSCANS-KIT

Standard Pipe & Cable Locator Kit

CAT NO. #TNVSCANM-KIT

Pipe & Cable Locator Kit with Metal Detector



# **GRID20/20 TRANSFORMER MONITORING SYSTEM**



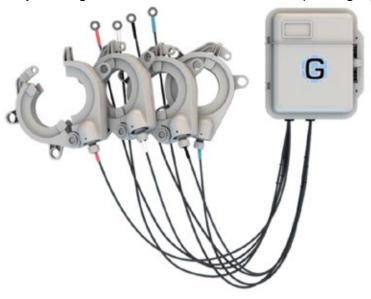
Grid20/20 pride the OptaNODE solution on ease and speed of installation, accuracy of patented outdoor rated and UV stable current sensors as well as compactness and robustness of design. Voltage, Current, Demand and Temperature feedback is aggregated and sent wirelessly [3G/RF-MESH] to Grid20/20 servers for real-time analytics & reporting.

Grid20/20 provides bi-directional energy feedback on transformers connected to Distributed Generation (wind/solar) ensuring distribution transformers are still operating

within their design constraints.

The ethos surrounding the OptaNODE design is to keep the unit cost low, allowing for greater network deployment which collectively provides a clearer picture of the LV network as a whole. The OptaNODE units are self-contained and maintenance free, designed for permanent installation both pole-top and pad-mount.

Optional extras: include SCADA integration, Energy balancing (theft detection), RF-Mesh compatibility, outage notification.



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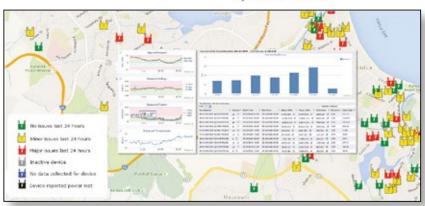
OptaNODETM PDTM-GP

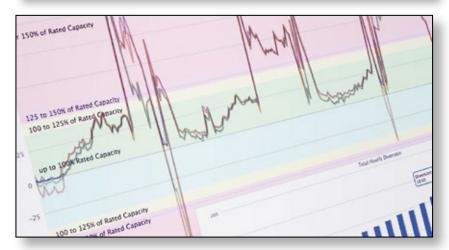
OptaNODETM PDTM-FX

# **KEY ADVANTAGES**

- Self-contained/Maintenance Free unit: Metering, Sensing, and Communications fully integrated.
- High accuracy of monitored transformer parameters within all ranges of operation
- Speed and simplicity of installation. No onsite calibration.
- AMI, SCADA, MDM, 3rd party platforms integration via DNP3, FTP, Web-services and MultiSpeak Interfaces.
- Flexibility to operate in diverse networks: multiple communications options available.
- Reduced complexity all backhaul infrastructure is operated by Grid20/20 meaning no on-site expertise required.
- Web Based, secure graphical user interface available anywhere in the world.







# GET THE SHOW ON THE ROAD

# With TransNet's Training Vehicles



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With the extensive range of products TransNet has to offer it makes perfect sense to hit the road and take our products to the people. We've had huge success with our past product roadshows and training, and the key for us is to keep it fresh and relevant for all potential visitors. We provide everything you need to stay ahead of the curve, and the best part about it is that it comes to you!

No matter where you are in the country, TransNet can help you enhance the work your business does and provide expert product training to your staff. We know that time is of the essence and it's hard to find the time to send staff to an offsite training session. With our involvement and sponsorship of national organisations like etco, Connexis and Skills we have found one of the most beneficial things we can do is offer onsite training for the products we supply to the industry. With the help of technical specialists from our suppliers we can show all levels of staff from engineers and project managers to field staff - the different aspects of products like connectors, meters, heatshrink, switchgear, LED lights, monitoring systems, pillars and TUDS pits amongst other things. We tailor the trainings to ensure those in attendance understand how our products can best support them and their role.

We can strip and populate the interiors of these vehicles to specifically target products that will be of interest to you and your network. Let's be honest, there is nothing worse than wasting your time looking at something that has no relevance to you or your business. Our team will get in touch to book a time (but you're more than welcome to contact us too!) and product ranges that are best suited to your business.

Our display vehicles will be on site again at the Connexis Annual Connection this year in Christchurch so they'll be road-tripping down in September to be there for the Competitions in October.

If you'd like more information on how to get us at your place contact us!





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Mobile Display & Training

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