



SOLAR PV PARADISE //

THE PAKIN ATOLL SOLAR PROJECT //

How a remote island community brought themselves one step closer to independence by installing Solar Energy to improve its Economy.

On an island approximately thirty miles northwest of Pohnpei, Micronesia lies a tropical deepwater atoll called Pakin. Its remoteness allows the locals to enjoy uncrowded tropical beaches, epic coral reefs, and world class fishing all to themselves, but it also means slow economic growth and opportunity.

Together with a Peace Corps volunteer, MAHI International (in cooperation with the Rotary Club of Pohnpei and AusAID Small Grants Scheme), and an aspiring solar company (Symtech Solar) Pakin Atoll got its chance to take a big step forward towards economic freedom and educational advancements.

Local Pakin inhabitants derive virtually their entire income from the local fisheries surrounding the Atoll and transporting marketable fish to the main island of Pohnpei must be done packed in ice. For many in the world this somewhat simple requirement to procure ice would normally involve a trip to the local market but the locals on Pakin Atoll have never enjoyed such luxuries. With no local grid or energy supply the islands inhabitants don't have access to common items found on the mainland...until now.

Ap Johnson, the Peace Corps project leader



PAKIN ELEMENTARY SCHOOL with solar PV system

for Pakin Atoll and John Schroer from MAHI International spent endless hours raising both money and awareness about the benefits of such a project and how it could positively impact the community there in the outer island.

"This project has made a significant impact to the livelihood of the local fishermen. Due to the tropical island temperatures previously perishable items can now be more successfully transported across the open ocean back to the main island. By allowing the fishermen to produce and manage their own ice supply, they have a much better capacity to dictate the schedule and quality of their catches to the market," says Ap Johnson.

Ap and John both noted that one of the greatest advantages of this project is that it serves as a foundation for further development in multiple areas of technology, business entrepreneurship, food preservation, education and healthcare. Already, projects are in progress to install computers and additional freezers purely powered by solar energy. Establishing a project such as this introduces a whole new aspect of community development in rural settings thus encouraging demand of replica projects. Already there are plans to expand the project and add more solar PV to the island.



Off-Grid Solar Project Makes an Impression

One Pacific island community makes an investment to go solar...



The PV System

The off-grid solar energy system installed on Pakin Atoll is rated at 3.6kW's and provides up to 15kWh's of energy per day. 16 230 Watt polycrystalline modules were roof mounted on the the island School with the help of the local community. Using the Flexpower pre configured power panel from Outback Power and Trojan deep cycle batteries ensures that the system will continue to provide power even in the harshest ocean environment.



Volunteers load up for the 30 mile trip to Pakin Atoll



Battery bank and inverter charger powering the ice machine

For product details please contact:
Cuthbert Stewart Ltd P 0800 288 423 or
email us on csl@cuthbertstewart.co.nz



NEW WEIDMULLER DATA PRODUCTS MAINLINE CATALOGUE 2012 //

Cuthbert Stewart and Weidmuller are pleased to announce the release of the brand new Data Products Main Line catalogue 2012.

This coincides with the launch of a new range of Weidmuller Ethernet switches. Weidmuller now has a far more comprehensive and complete range right up to 19 inch, level 3 rack units. All the switches have a metal housing which act as a heatsink as well as providing the highest levels of EMC protection. The switches are rated with an IP40 protection and with a wide operating temperature range (-10 to 85 Deg C or -40 to 85 Deg C).

Along with the Ethernet switches there are media and serial converters, wireless options, POE and a brand new GSM router.

The new catalogue contains all the well proven passive connectivity products Weidmuller has to offer. These include industry standard

copper and fibre patching rail connectors, fibre and copper patch cables, and the modular range of the IP67 Ethernet plug and socket arrangements.

The new catalogue can be downloaded on the CSL website at:

<http://www.cuthbertstewart.co.nz/product/Data/Weidmuller/DataCatalogue2012.pdf>

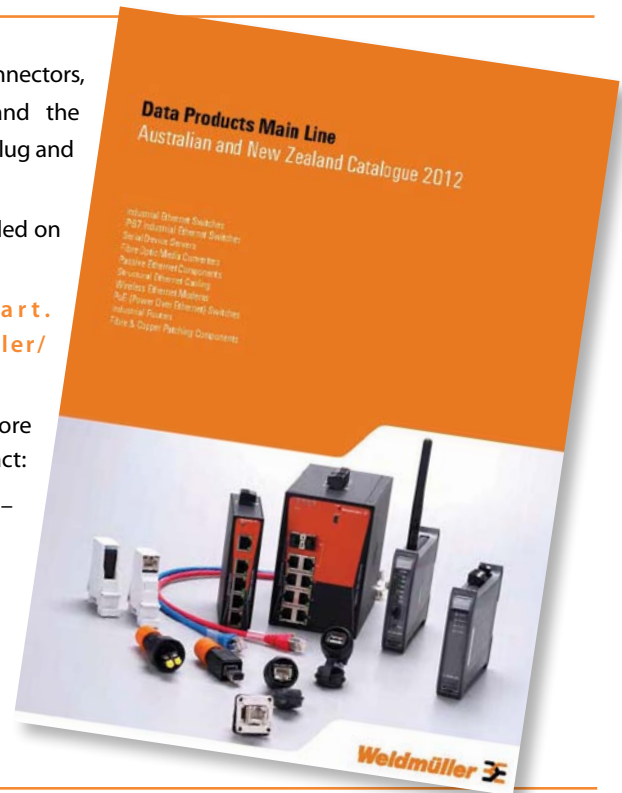
Or we can send you a copy, for more information and pricing please contact:

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FLUKE 28 II EX INTRINSICALLY SAFE TRUE-RMS DIGITAL MULTIMETER //



Intrinsically Safe/Intrinsically Rugged/Intrinsically Fluke

Now there's one intrinsically safe digital multimeter you can use in IIC (gas) Zone 1 and 2 and IIIC (dust) Zone 21 and 22.

Whether you work in petroleum, chemical, or pharmaceutical environments, all the test and troubleshooting power you need is packed into the most rugged intrinsically safe DMM Fluke has ever built.

The Fluke 28 II Ex is also waterproof, dustproof and drop proof and more rugged than ever. You will be equipped to handle any situation, inside and outside of hazardous zones, without compromising compliance or measurement performance.



What's new in the 28 II Ex?

The Fluke 28 II Ex is the most rugged Intrinsically Safe (IS) DMM available. New features include:

- A completely sealed, IP67 rated case
- Withstands drops up to 3 meters (9.8 feet) with holster
- Dustproof and Waterproof per IEC60529
- Meets IEC Overvoltage Electrical Safety Standard No. 61010-1:2001
- Measurement Category III, 1000V, Pollution Degree 2
- Measurement Category IV, 600V, Pollution Degree 2
- Reversible holster for added protection of the display when not in use

Safety certifications

The 28 II Ex currently has two globally recognised safety certifications: • ATEX • IEC Ex

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WEIDMULLER LAUNCHES ITS LATEST OFFERING IN THE 6 MM WIDE ACT20M RANGE OF SIGNAL ISOLATORS AND CONVERTERS //

The Weidmuller ACT20M range of isolators and converters brings the benefits of technology development to signal isolators.

This provides all the features required in isolators and converters in a space saving 6mm housing. Benefits include 2.5kV: 3 way isolation, accuracy to 0.05% with ambient operation of -25°C to +70°C on most models. Simplified power supply wiring is achieved with direct connection or via the DIN Rail Bus to supply power to all modules.

CSL now has the new Weidmuller Input and Output loop powered (powered by the 0-20mA or 4-20mA signal current) units in stock, and the range has single and dual channel models available. This is the simplest method of isolating signals passed from one device to another to eliminate electrical interaction between them.

Often used to fix unexpected loop isolation problems, it requires no additional wires to be installed. You simply break the problem loop and install the device.

Competitively priced and only 6mm wide the devices are now available from Cuthbert Stewart.

Input loop powered:

Single Channel - ACT20M CI-CO-ILP-S, part number 1176070000

Dual Channel - ACT20M 2CI-2CO-ILP-S, part number 1176080000

Output loop powered:

Single Channel - ACT20M CI-CO-OLP-S, part number 1176040000

Dual Channel - ACT20M 2CI-2CO-OLP-S, part number 1176050000



For more details, see our homepage at www.cuthbertstewart.co.nz

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WEIDMULLER UNVEILS 3G INDUSTRIAL ETHERNET SECURITY ROUTER //

The world's leading electrical connectivity supplier Weidmuller has created a 3G router that delivers comprehensive security features.



The 3G industrial Ethernet router and its sister model – the WAN/LAN industrial Ethernet router – translate addresses between different networks using protocols such as port forwarding, 1:1 NAT or masquerading to protect all the Ethernet devices of the hidden network and to ensure safe integration into the network.

In addition, the routers also enable access to infrastructure from around the world via encrypted VPNs using OpenVPN as well as IPSec technologies to deliver high-level security with minimum effort.

Both models boast an inbuilt SPI firewall to prevent unwanted remote network access.

Better still, the fully functional firewall can be configured to meet individual rules for both Layer 2 (Ethernet) and Layer 3 (IP) transport, to deliver top-level security.

Highly intelligent, the firewall also has an auto-learning feature that adapts automatically to the network traffic it sees.

This feature provides inexperienced network people highly effective protection. Generated rules can be edited or deleted.

Performance driven, the industrial security routers are highly reliable and robust. They support Modbus TCP commands and also feature two digital inputs and outputs for functions and alarms.

Both models have gigabit ports to enable high speed throughput of data in corporate networks. For remote networks, the 3G model provides a peak downlink of 7.2 Mbps and a peak uplink of 5.8 Mbps to deliver a quality connection.

For peace of mind, both routers use the memory of a SIM card for external backup and for restoring the system's configuration.

Operable in temperatures from -20°C to +70°C the routers conveniently run on minimal power from 7V to 36Vdc and can be battery or solar operated at fixed installations or on vehicles.

Housed in a rugged DIN rail mount case to withstand demanding environments, both models are suitable for use in mining, road and transport, and water industries as well as for remote access for automation companies during commissioning and warranty.

Easy to set up and truly value-packed, the security routers are available with a three-year warranty.



CSL ARE NOW THE NZ DISTRIBUTOR FOR MAG-SLAB CABLE COVER //

Cable cover is made for the protection of people that work 'with and around' power cables. It provides effective protection against the dangers of diggers damaging buried cables for electricity, gas, telecommunications or water.

Standard AS4702

The diagram on the right represents the penetration testing which all cable cover is subjected to before it is accepted, labelled and sent out the door. This test is based on a probe or striker impacting the cable cover at certain areas as indicated below and the ability of the striker to penetrate the cable cover.

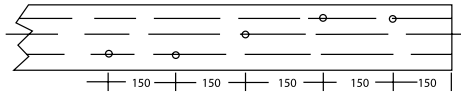


Figure 1. Pattern of test drops to meet the standard.

This is an extremely important test and helps guarantee your cable cover will withstand impact. Many other cable covers on the market may not have been subjected to the level of testing EnviroReel Plastics undertake on their cable cover.



To ensure the product meets and even exceeds the stringent standards of AS4702, each production run is batch tested.

To prove that the magical process of converting waste plastic into a highly specified product suitable for use in the electrical industry, every pallet is accompanied by a test piece taken from the batch testing process, plus the results sheet taken from the laboratory.



Made from 100% recycled plastic

NZ MADE

Product Information

Cable cover is manufactured in a number of standard sizes:

25 metre length ROLLS	2 metre length STRIPS
x 100 mm wide	x 100 mm wide
x 150 mm wide	x 150 mm wide
x 200 mm wide	
20 metre length ROLLS	x 300 mm wide

Manufactured from a mix of recycled HD & LD polyethylene under a strict Qbase system.

All production is Batch Tested.

CODE	Cable Cover Description	Rolls per Pallet
MAG100	100mm W x 25m L	40
MAG150	150mm W x 25m L	40
MAG200	200mm W x 25m L	30
MAG300	300mm W x 20m L	20

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