

PowerView CP

Cathodic Protection
for the 21st
Century

The logo for Omniflex, featuring the word "Omniflex" in a white, cursive script font with a registered trademark symbol, set against a blue background.

REMOTE MONITORING SPECIALISTS

Corporate Overview



the
remote
monitoring
company

OMNIFLEX has been designing and manufacturing electronic products and systems for the automation and control industry since 1965.

We specialise in providing solutions to industry in the fields of Remote Monitoring, Critical Alarm and Event Management, Data Acquisition and Control, and Energy Management.

Omniflex has expanded its range of monitoring and control and power products to include specialist products for impressed current cathodic protection systems called *PowerView CP*. This system harnesses our depth of experience in power control and remote monitoring in harsh environments to bring reliable cost saving solutions to the challenges associated with managing impressed current cathodic protection systems in remote locations.

Working with leading experts in the field of cathodic protection, we have designed a system that is assisting to reduce operating costs and the carbon footprint associated with these kinds of systems.

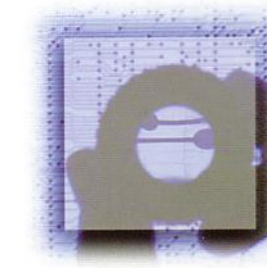
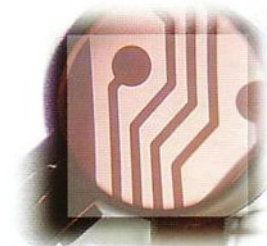
Omniflex solutions are being relied upon every hour of every day by major corporations around the world.

An investment in solutions that carry such a large responsibility requires confidence in our track record, and the continued reliance of some of the world's largest industries on OMNIFLEX technologies is sufficient testimony to this support

Don't ask us – ask our loyal customer base.

www.omniflex.com

*your link to reliable solutions
in cathodic protection.*



Cathodic Protection

*Be best in class
More energy efficient
Lower operating costs*

What is CP?

Cathodic protection (CP) is a technique to control the corrosion of a metal surface. Cathodic protection systems are most commonly used to protect steel used in structures such as pipelines, storage tanks, steel piles, ships, offshore oil platforms, and reinforcing steel in concrete.

The simplest method of cathodic protection is galvanic protection where a metal of different electrochemical potential is used as a "sacrificial" anode, connected to the structure.

For larger structures, galvanic anodes cannot economically deliver enough current to provide complete protection. Impressed current cathodic protection systems use anodes connected to a DC power source to achieve this protection.



Operating Costs

These DC power sources require regular monitoring and adjustment to ensure that they are providing the necessary protection. This ongoing monitoring includes the regular conducting of specialised testing overseen by a cathodic protection expert. Where the structure being protected is remote, this can become costly.

Take control of your assets - remotely

A Better Way

Omniflex are experts in remote monitoring and control. With years of experience operating in the harshest of environments, we have applied this technology to provide a cost effective and reliable solution to remote monitoring and control of Cathodic Protection systems.



Benefits

Whether you have an existing Impressed Current CP system, or are planning a new installation, a *PowerViewCP* solution can reduce your life cycle costs.

PowerViewCP is extremely scalable. Whether you operate one system or one hundred systems, management and control of your CP assets will be easier with a unified Omniflex solution.

Some the benefits include:

- High efficiency T/R's for reduced power.
- Regular status reporting by email
- Alarm condition alerts by SMS or email
- Cloud based long term data storage
- Web based condition monitoring
- Automated testing and result logging
- World-wide system coverage
- Monitor your existing CP systems.

Remote Monitoring and Control gives savings

Overview

PowerView CP

What is PowerView CP

PowerView CP is a field-proven Impressed Current Cathodic Protection System with communications built to the core, providing more efficient system adjustment, qualification and management both on site and by remote access.

Communications to the Core

What is Different?

Many conventional Impressed Current CP systems are built on older phase angle controlled Transformer/Rectifier (T/R) techniques. That technology was well suited to the simpler solutions of decades ago.

The problem is that those systems waste energy and have no intelligence which makes them difficult (i.e. expensive) to control or monitor.

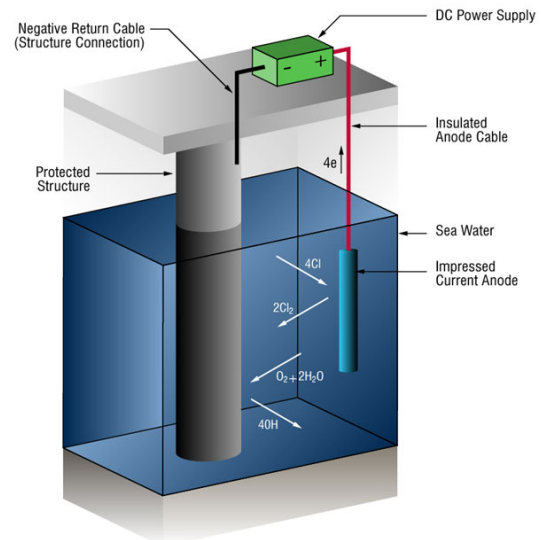
PowerView T/R's are designed using more modern switch mode technology (similar to all modern computer power supplies) which makes them smaller, far more efficient and more accurate. In addition, each Powerterm CP T/R has embedded intelligence making it easy to control and monitor remotely.

**High Reliability
Proven in service**

Reliability

Using technology now standard in over 99% of the world's most reliable power sources, Powerterm components are designed for typically 30 year life.

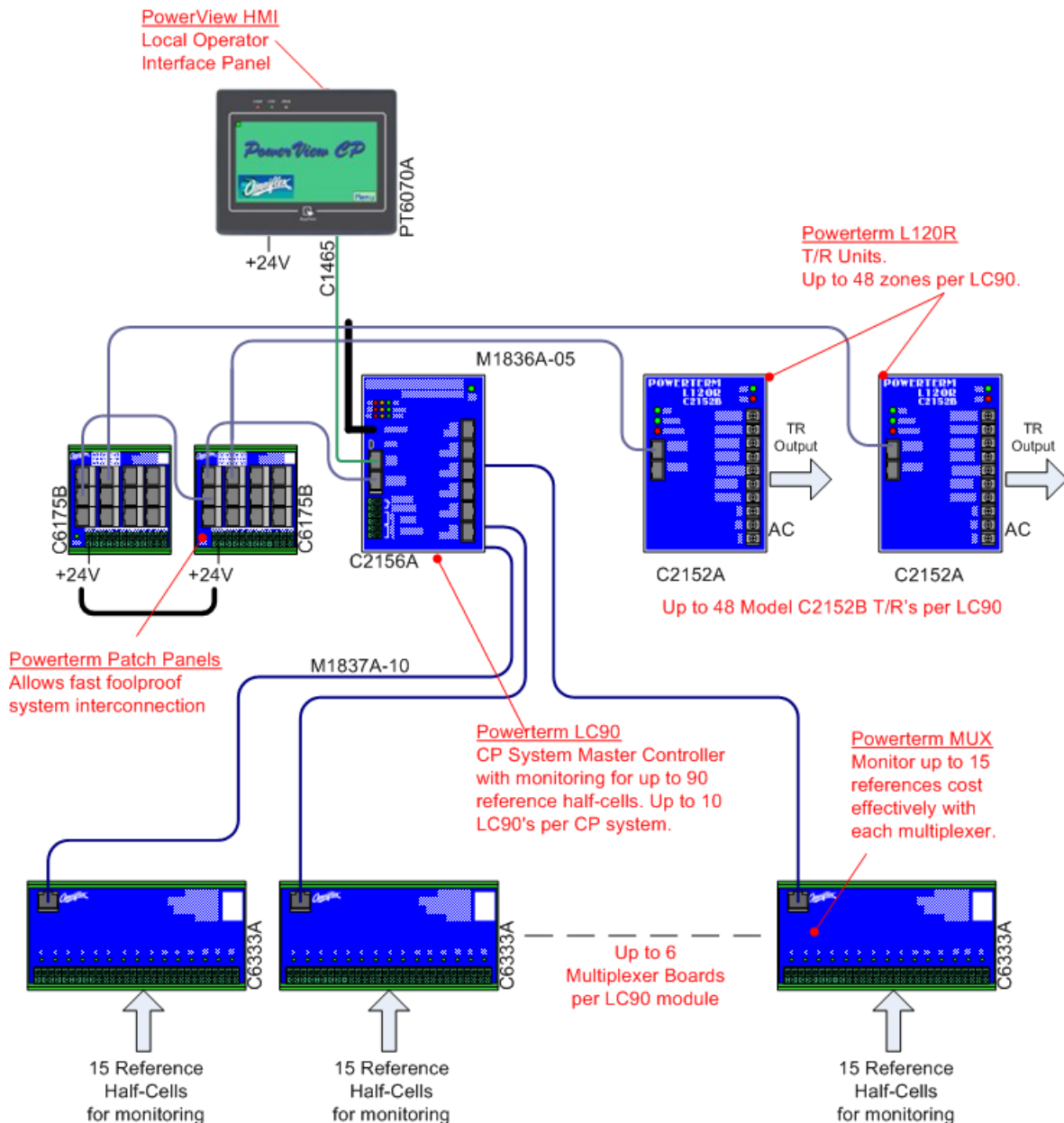
This power supply technology is field proven, with hundreds of Powerterm devices installed in the field for over a decade.



System...

Full System Advantage

The PowerView CP System Architecture for cost effective Remote Control



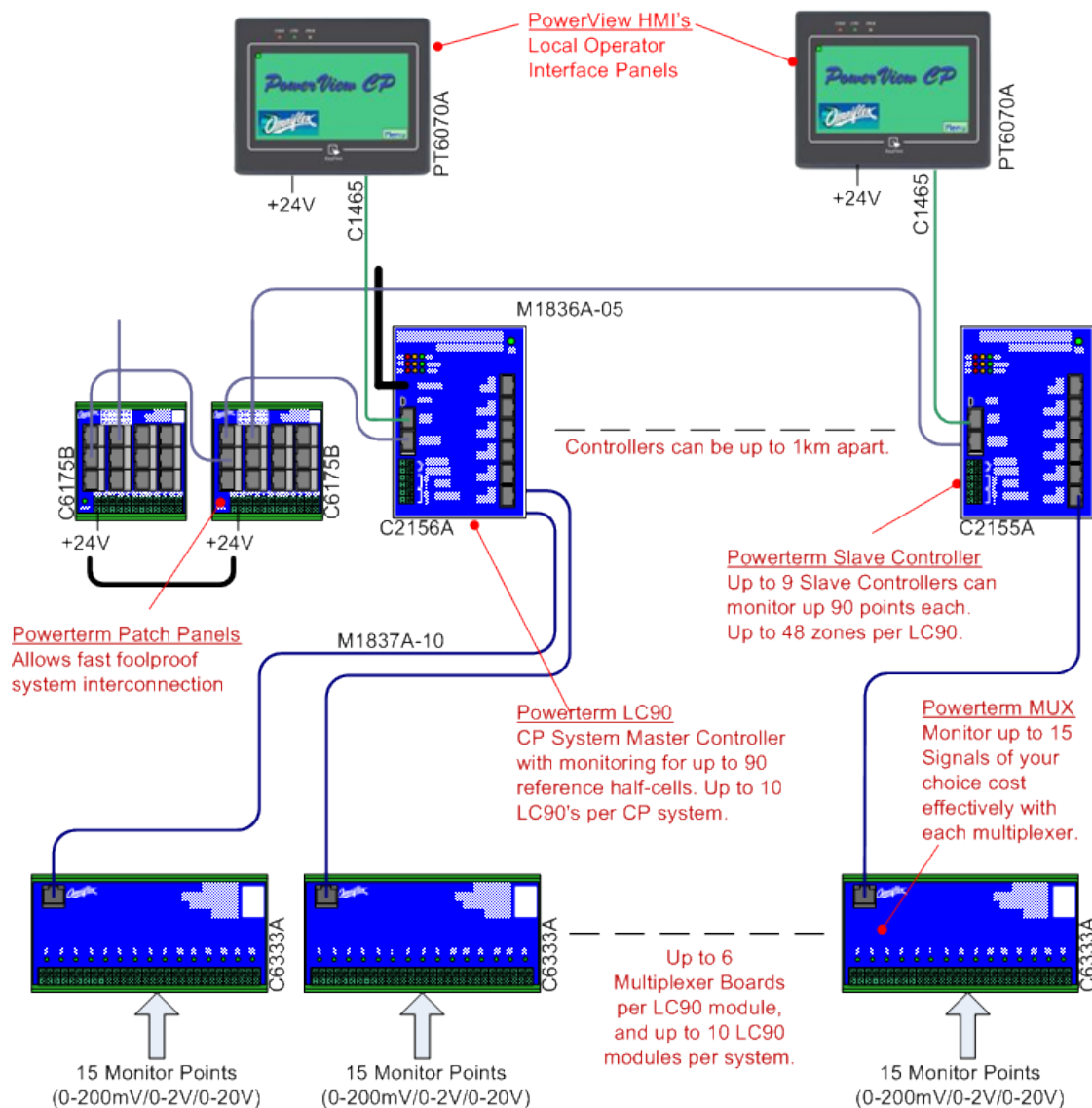
- Integrated communications for total control.
- Web based interface ensures simple operation.
- High Reliability T/R's
- Communications by mobile phone, Satellite, Ethernet, etc.
- Perform Instant Off, Depolarisation and Interference tests remotely.



...Solutions

Monitoring existing systems

Monitor any existing Impressed Current CP System



- All inputs isolated to 500Vdc and >10Mohm input impedance
- Inputs can be individually configured as:
 - 0-±200mV (e.g. Current Shunts)
 - 0-±2V (e.g. Reference Half Cells)
 - 0-±20V (e.g. TR Outputs)

Benefits

The Savings Motivation

Why Remote Monitoring?

Remote monitoring is the most cost effective way to manage your CP protected assets.

The large geographic spread of these assets mandates a remote management philosophy structured to optimise your cost base.

Better managing these assets over time will provide you with cost advantages such as:

- Lower operating costs
- Faster response times
- Better service levels
- Improved safety guarantees.

What Remote Monitoring?

The World Wide Web based represents the coming of age of Remote Monitoring of your CP assets.



Previous generations of remote monitoring systems have been plagued by unreliable communications, and fast technology obsolescence. The Internet is proving to be the most reliable and long-lived technology available that is opening up new avenues for cost efficiency, providing a catalyst for changing business models.

For the first time, the secure storage and access of long term data is no longer reliant on the version of computer software and hardware in your possession.

Why Omniflex?

Remote Monitoring is our business.

No longer do you have to put up with inferior remote monitoring as an after-thought, bolted on to old technology, with a different system from each CP system supplier.

In the PowerView CP system, remote monitoring is built in to the core, and behind the technology is a company passionate about delivering you a remote monitoring solution that works, and works.

We are able to deliver you an integrated data storage and reporting framework that will deliver a single framework for all your CP assets, regardless of their vintage and vendor.



“For enterprises that use embedded [wireless communications], there is the potential for greater efficiency, improved business processes, and innovative business models. The net results: lower costs, faster response times, better service, and most importantly – higher revenue.”
[Deloitte Research]

Measure → Manage → Save

www.omniflex.com/cp



Solutions by Design