

# BOISWOOD

GAS AND LIQUID CONTROL TECHNOLOGIES

Pressure & Vacuum

Flow

Level & Temperature

Tube & Fittings

HVAC/R

Custom Services

## Power & Utilities

Products and Services Catalogue





## WE'RE KNOWN FOR SELLING SOLUTIONS

**Our journey started in 1989, when Boiswood was founded. As our knowledge and expertise grew, so did our vast range of products and services, and today, we are one of the country's most well respected and trusted suppliers of gas and liquid control technologies.**

We are partnered with several high-quality, globally reputable manufacturers with a distinct range of products and services that offer unique features and benefits to EPC's, System Integrators, OEM's and End Users....our customers.

Our whole business culture centres around our genuine commitment to hands-on service and support, whenever and wherever this is required. We offer unparalleled advice and support, and our 'one stop shop' approach removes all the headache and hassle from our customers, ensuring you always get what you need on-time, on-budget and the perfect fit for your application.

We have over 30 years of successful experience in an extensive range of applications and processes within the markets we serve. Our visionary, technically astute and customer focused approach ensures we consistently add value. Working closely with our customers and supply partners ensures we stay up to date with the latest technologies, using our insight to facilitate the niche and specialist markets we serve.

You can rely on us to specify, supply and support all your gas and liquid control needs.

# BOISWOOD

GAS AND LIQUID CONTROL TECHNOLOGIES

The economic and ecological pressures we face today impact every industry and business, pushing the issue of energy consumption onto the agenda. Whether your objective is to cut your energy usage, or to find a simple solution for conforming to energy use regulations, we can provide you with a product to help you achieve your goals.

## WE'VE GOT THE POWER

We're proud to have a strong and long-standing reputation for supplying innovative products engineered to monitor, manage and reduce power and energy use. Distributing products and

components from globally respected manufacturers we can guarantee you high-performance products to suit specific technical requirements.

We supply pressure regulators, condensate and steam traps, valves and fittings as well as monitoring devices such as flow meters, pressure transducers and power/energy meters. Need support addressing your control and instrumentation needs? One of our expert technicians will be happy to help you, simply call 01452 330011.

## WE'RE TRUSTED BY...





# Product Solutions

## PR1 SERIES

Instrumentation Pressure Regulators



**GO** REGULATOR

 In Stock

The PR1 Series is a versatile pressure reducing regulator designed to fulfil a wide range of needs in instrumentation sample systems and other applications.

### TECHNICAL DATA:

Gas or Liquid Service • Inlet Pressures up to 6,000 PSIG • Outlet Pressures from 10 to 750 PSIG • -40°C to +260°C Temperature Ranges • Five Seat Material Options • 20 Micron Inlet Filter • Range of CV values up to 0.50

### FEATURES & BENEFITS:

Range of standard configurations in stock • Easily field maintainable • Long-life span • Training Services available

## CYL-20 SERIES

Dual Stage Pressure Regulators



**GO** REGULATOR

 In Stock

The CYL-20 Series offers precision pressure control with less than 0.01% outlet pressure change with varying inlet pressures, and is designed for use in gas calibration systems and cylinder applications.

### TECHNICAL DATA:

Gas or Liquid Service • Inlet Pressures up to 6,000 PSIG • Outlet Pressures from 10 to 500 PSIG • -40°C to +260°C Temperature Ranges • Five Seat Material Options • 20 Micron Inlet Filter • Range of CV values up to 0.50

### FEATURES & BENEFITS:

Range of standard configurations in stock • Easily field maintainable • Long-life span • Training Services available

## 3100 SERIES

Thin Film Pressure Transducers



**Gems**  
Sensors & Controls

 In Stock

The 3100 Series is ideal for OEMs that require consistent high levels of performance, reliability and stability utilising the sputtered thin film technology.

### TECHNICAL DATA:

Pressure Ranges from 0 – 7 BAR up to 2,200 BAR • High Proof Pressures • Broad Choice of Outputs and Pressure Ports • Pressure and Temperature Measurement Combination • RoHS Compliant • From -40 to +125°C Temperature Ranges

### FEATURES & BENEFITS:

Unbeatable Price/Performance Ratio • Compact Design • OEM Discount Available

## DM505 SERIES

Universal Process Pressure Regulators



**MANKENBERG**

The DM505 Series is a self-acting pressure reducer offering simple and accurate control, whilst being extremely easy install and maintain.

### TECHNICAL DATA:

Gas and Liquid Service • Up to 3,600 PSIG Inlet Pressure • Adjustable Outlet Pressures of up to 290 PSIG and down as low as 0.07 PSIG • Operating Temperatures from -35°C to +130°C

### FEATURES & BENEFITS:

Fast Delivery • Fully Customisable • Ease of Maintenance • Long Life Span • Precise Control Ranges • Adjusting Screw Externally Visible • BGV Compliant for Combustible and Aggressive Media

## HPR2 SERIES

Heated Pressure Regulators



**GO** REGULATOR

The HPR2 series electrically or steam heated pressure regulator is designed to supply heat to samples entering instrumentation systems.

### TECHNICAL DATA:

Gas or Liquid Service • Inlet Pressures up to 6,000 PSIG • Outlet Pressures from 10 to 500 PSIG • Five seat material options • Range of CV values up to 0.20 • Available in 120 or 240 VAC • CSA and ATEX Approved

### FEATURES & BENEFITS:

Unique spiral wrapped heat exchange element provides up to 100 square inches of transfer area • Modular pressure control and heat exchanger assemblies for easy maintenance

## POWER METER SERIES

Revenue Grade Power Meters



**setra**



The Power Meter is a networked revenue grade power meter built on a versatile and powerful platform designed to meet the high demands for any submetering application.

### TECHNICAL DATA:

Monitor 3, 12 or 48 loads on any combination of single and/or three phase systems • Monitor voltage, current, power, energy and many other parameters • Onboard display

### FEATURES & BENEFITS:

Rotatable display to simplify installation • Field selectable communication protocols • Safe access without PPE • Easy installation and configuration

# Product Solutions

## PAD SERIES

Differential Pressure Transmitters



HART  
COMMUNICATION PROTOCOL



The PAD series is a micro-processor based high performance transmitter, with flexible calibration and output configurations.

### TECHNICAL DATA:

Up to 413.7 BAR Measuring Range • 310 BAR Max. Static Pressure •  
Up to +120°C Temperature • Various Output and Connection options •  
Differential, Gauge or Absolute pressure types •  $\pm 0.075\%$  High Accuracy

### FEATURES & BENEFITS:

Digital communication with HART® Protocol • ATEX Version Available

## PAS SERIES

Standard Pressure Transmitters



HART  
COMMUNICATION PROTOCOL



The PAS series is available as a piezo-resistive pressure transmitter capable of measuring gauge and absolute pressures.

### TECHNICAL DATA:

Up to 600 BAR Measuring Range • Up to +120°C Temperature Range •  
Various output and connection options • Gauge or Absolute pressure types •  $\pm 0.075\%$  High Accuracy

### FEATURES & BENEFITS:

Digital communication with HART® Protocol • ATEX Version Available •  
Self-diagnostic function (sensor, memory A/D converter, power)

## SCCT SERIES

Split Core Current Transformers



The Split Core Current Transformers provide a high accuracy current measurement over a wide dynamic sensing range for power metering applications.

### TECHNICAL DATA:

From 20 to 400 Amps • 333mV Output at rated current

### FEATURES & BENEFITS:

Industries first UL 2808 certified CTs

## XLS-1 SERIES Ultrasonic Level Sensors



The XLS-1 ultrasonic level sensors are compatible with water and hydrocarbon based liquids, and are perfect for applications where condensation may affect other sensing technologies.

### TECHNICAL DATA:

Pre-set based on required actuation condition (Wet/Dry Sink/Source)

- 316L Stainless Steel Housing
- Range of Port Threads and Electrical Connections
- -40°C to +125°C Temperature
- Up to 250 PSIG Operating Pressure
- Range of Seal Materials

### FEATURES & BENEFITS:

- Ignores Condensation on Sensor
- Zero Maintenance
- Solid-State with No-Moving-Parts
- Will Not Sense Foam as Liquid
- Microcontroller-Based Electronics

## CAP-300 SERIES Capacitive Level Sensors



The CAP-300 capacitive level sensor is one of our most durable and reliable point level sensors, designed as a versatile OEM solution for specialty and off-highway vehicles

### TECHNICAL DATA:

Pre-set based on required actuation condition (Wet/Dry Sink/Source)

- Brass or 316L Stainless Steel
- Range of Port Threads and Electrical Connections
- -40°C to +125°C Temperature
- Up to 100 PSIG Operating Pressure
- IP67 Rated Seal Design

### FEATURES & BENEFITS:

- Cost-Effective Solution
- Tolerates Coolant Coating
- Developed for rugged aqueous applications
- Zero Maintenance
- Mount in Any Position
- Non-Contact Versions Available

## 3600 SERIES Electronic Pressure Switches



The 3600 series solid-state pressure switches offer exceptional stability with all welded stainless steel housing to handle rough environments, ideal for demanding off-highway vehicle applications.

### TECHNICAL DATA:

- From 0 – 7 up to 0 – 100 BARG Pressure Ranges
- Range of Pressure Ports and Electrical Connections
- 17-4 PH Stainless Steel
- -40°C to +105°C Temperature
- ±0.5% Accuracy
- Factory pre-set switch calibration

### FEATURES & BENEFITS:

- Long Cycle Life
- No Moving Parts
- Fully Hermetically Sealed
- Exceptional stability through Sputtered Thin Film Technology
- Cost-Effective OEM Pricing
- Optional Communication Interface

# Product Solutions



## PRESSURE GAUGES

Including Mechanical and Digital Pressure Gauges and Indicators



## INSTRUMENTATION VALVES

Including Ball, Needle, Plug, Check, Toggle, Relief and Quick Connects



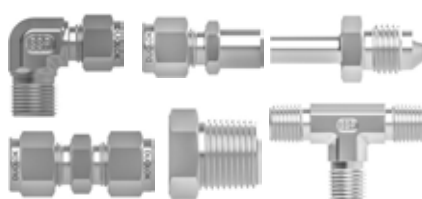
## MANIFOLD VALVES

Including Block, Bleed, Vent and Gauge Manifolds



## CONTROL VALVES

A range of pneumatic and electric Globe, Bellows and Control Valves



## INSTRUMENTATION FITTINGS

Including Twin Ferrule Compression Tube, Pipe and Weld Fittings



## HIGH PURITY FITTINGS

Including FaceSeal™, Microweld and PFA/PTFE Fittings



## FILTERS, STRAINERS & SEPARATORS

A range of filters, strainers and separators for process and vacuum



## BURSTING DISKS

Including forward and reverse acting bursting disks and holders



## TUBING, PIPING AND HOSES

A selection of metal tubing, hoses and PTFE/PFA piping.



## PRESSURE SWITCHES

Including Mechanical and Digital Pressure Switches and Sensors



## SOLENOID VALVES

Including miniature, latching and cryogenic versions.



## WIRES & SEALS

Including feedthroughs, sealing glands and packing glands.



## CUSTOM SOLUTIONS

Boiswood have been involved in several custom build projects to meet our customers' specific requirements, please visit our website to read our application successes or feel free to ask for more details.

Many of our customers call upon us for subassembly, service, repair and testing solutions from within our manufacturer-certified headquarters.



## Value Added Services



### In-House Service Centre

We can offer manufacturer certified in-house evaluation, repair, testing, servicing and assembly of our products from within our Boiswood HQ.



### Local Technical Support

We offer a technical helpline from our HQ as well as having a “man on the ground” for on-site support whenever and wherever this is required.



### Fast Turnaround

Our local stocks allow us to quickly respond to requirements. We hold a vast range of products in stock so that they're always readily available.



### Training Services

We provide a range of educational classes and training seminars that can be delivered from Boiswood HQ or on-site.



### Design Services

Over the years we have been involved in many bespoke product designs and system build solutions for our customer base.



### Response Times

We endeavour to provide all our customers with unrivalled service with quick responses to both technical and commercial queries.



# Products in Focus

## Power Meters



Our new Power Meter is a networked revenue grade power meter built on a versatile and powerful platform designed to meet the high demands for any submetering application. Available in a 3, 12 or 48 load configuration, the meter enclosure and intuitive web portal interface significantly reduce installation time and cost per metering point.

Centred around years of engineering, development and customer feedback, we have produced a complete solution to stage as an upgrade for any application where power monitoring is required.

## Networked Multi-Load Power Meter

- Easy installation and configuration
- Field Selectable Communication (5-In-1)
- Multi-Load Monitoring and Data Logging
- Safe Access without PPE

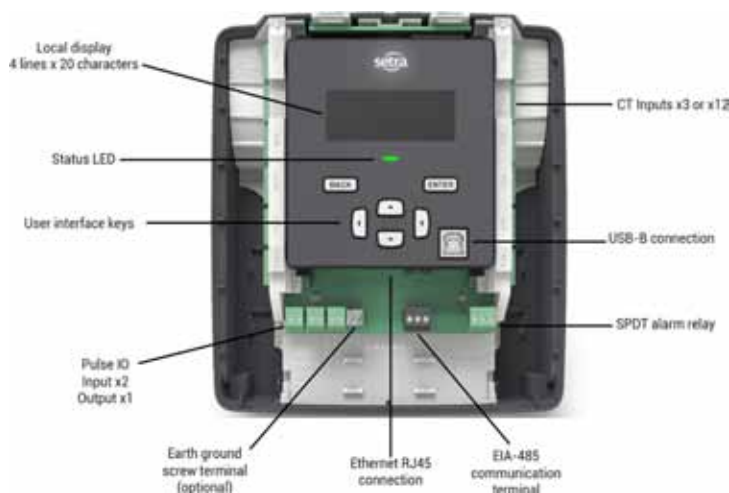


1. Model	
SPM	Power Meter

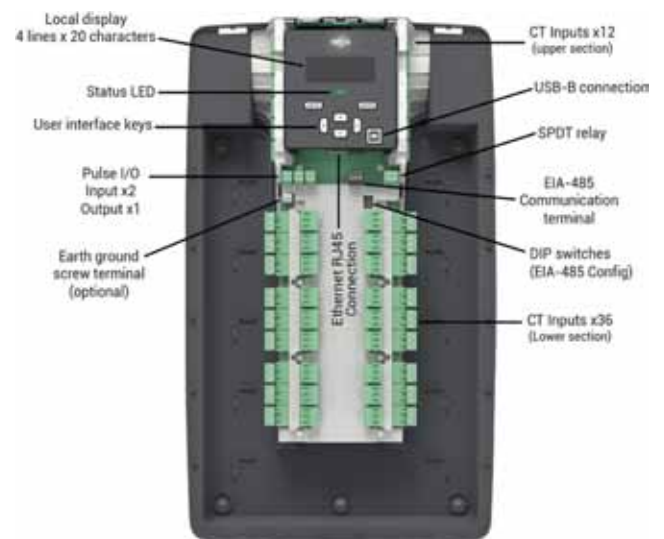
2. Loads	
03	3 Loads
12	12 Loads
48	48 Loads

3. Communication	
E	Ethernet & Serial

4. Display	
D	On-Board Display



3 or 12 Load Meter



48 Load Meter

## QuickStart Software and Web Portal



The QuickStart Software (available for free download) allows you to easily connect the meter into your PC, complete the setup to your desired configuration and upload the settings directly to the meter.

The Web Portal solution allows you to login online and access real-time data and make live changes to your power meters configuration.



### EASY USB CONFIGURATION 1

Quick start, clone feature settings and configure anywhere.



### FIELD SELECTABLE CT'S 2

Rogowski Coil and Split-Core CT compatible.



### 5-IN-1 COMMUNICATIONS 3

Increased flexibility and eliminates ordering mistakes.



### DATA LOGGING 4

62 Days of data at 5 min intervals, backed up and end-user accessible.



### BROADBAND LINE POWER 5

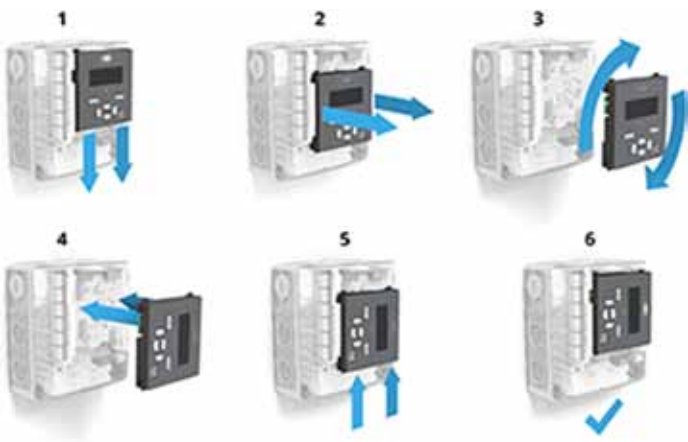
80-600 VAC powered, dual-voltage inputs and self-powered (Vin1).



### REVENUE GRADE ACCURACY 6

ANSI 12.20 Class 0.2 to revenue grade standards.

# Products in Focus



## Installation Flexibility

Every Power Meter was painstakingly designed to simplify installation. The enclosure of the power meter is its own NEMA 1 rated electrical enclosure, eliminating the need to purchase an electrical panel for the job. The field rotatable display allows the installer to put the conduit holes exactly where they need to be for any mounting configuration, even in the tightest locations in the electrical room.

## Built on Customer Feedback

All of the features on the new power meter have been centred around years of valued customer feedback. Comparing our old power meter models

to the new, we are offering one of the most advanced power meters available on the market.



Old Power Meters	Features	New Power Meter
✗	Data Logging	✓
✗	Installation	✓
✗	Power Odometer	✓
✗	UL Listed Enclosure	✓
✗	Rotatable Display (Conduit Flexibility)	✓
✗	IP40 High Voltage Cover	✓
✗	Intuitive Web Portal Configuration	✓

## Why Pay for Hidden Costs?

Our power meter incorporates fused leads, an IP40 rated electrical enclosure and suitable panel mounting to eliminate any hidden associated installation costs.

Our Power Meter	Expense	Leading Competitors
\$\$	Submeter	\$\$
\$	Current Transformers	\$
\$0	Fused Leads	\$\$\$
\$0	Enclosure	\$\$
\$0	Labor for Assembly	\$

When compared to leading competitor brands, our power meter solution is overall one of the most cost-effective solutions available.





## Patrol Flex Rogowski Coil

Offered in 12", 24" and 36" lengths, the Patrol Flex is the most accurate Rogowski Coil in submetering. Rogowski Coils offer significant installation advantages over split-core CTs because of their lightweight, wide current range, mechanical

flexibility for mounting in tight quarters and easy placement around cable bundles and busbars. The Patrol Flex leads can be extended up to 300" without degrading the accuracy of the unit. The Patrol Flex is calibrated to be better than 0.5% accuracy for use in revenue grade applications.

### BEST IN CLASS LINEARITY

Conventional CTs are wound over a magnetic iron core, which makes them more susceptible to saturation leading to linearity error. Engineers and contractors must adjust the phase shift of the meter to compensate in order to achieve an accurate reading. Rogowski Coils are wound over a non-magnetic core, giving them perfect linearity and improved accuracy over wide current ranges.

#### Advantages:

- High Accuracy:  $\pm 0.5\%$  FS
- Lightweight:  $< 0.5\text{Lbs}$
- Minimal Linearity Effect:  $\pm 0.2\%$

### INSTALLATION SAVINGS

Installers can save significant time and labour using the Patrol flex due to its flexibility and ease of surrounding conductors of all sizes. Selecting a Rogowski Coil instead of a conventional split-core CT can save the installer over two hours per metering point in a challenging installation, which could be the difference between making and losing money on a job.

#### Advantages:

- Easy Installation
- 3 Sizes (12", 24" and 36")

### WIDE CURRENT RANGE

The Patrol Flex has a current range of 5 – 5,000A yet weighs less than 0.5Lbs, drastically reducing shipping costs. A typical 100A CT weighs 2Lbs, however as the current range expands to 3000A, the average weight can increase from 2Lbs to 20Lbs. Considering three CTs are required to a monitor a 3-Phase motor, certain applications could require up to 65Lbs of shipping weight per metering point.

#### Advantages:

- Reduce Inventory
- Reduce Costs


# Products in Focus

## What is submetering?

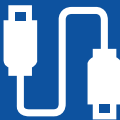
Submetering is the installation of metering devices with the ability to measure energy usage after the primary utility meter. Submetering offers the ability to monitor energy usage for individual tenants, departments, pieces of equipment or other loads

individually to account for their actual energy usage. With submetering, a clear and accurate picture of how and when energy is being consumed inside a facility is created.


## How can you save money?

**SAFE CONFIGURATION 1**

Local configuration can take up to 3x longer than configuration with our HeadStart Software – no need to setup in a live enclosure.

**EASY USB SETUP 2**

Initial setup of our power meters can be done directly from a USB laptop connection, allowing cloning of parameters for multiple meters.

**SINGLE METER CAPABILITY 3**

Our power meters work on 80 to 600V loads. One single meter that can handle all volt loads in between.

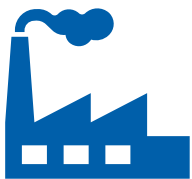
## What are the applications?



HOSPITALS &  
HEALTHCARE  
FACILITIES



UNIVERSITIES &  
EDUCATIONAL  
FACILITIES



INDUSTRIAL &  
MANUFACTURING  
PLANTS



RETAIL &  
COMMERICAL  
BUILDINGS



## Assembly & Testing

Our stocks allow us to assemble and test a variety of pressure regulators on a next-day delivery services.



## Service & Repair

We can offer manufacturer certified service, repair and certification for our range of pressure regulators.



## Subassembly

We can take special requests for component subassembly and control panel design solutions according to your requirements.



## Pressure Regulators and Valve Selection Seminar

Selecting the correct pressure regulators and instrumentation valves to suit your needs can be a complex exercise with several factors to consider. Our seminar has been developed to help you understand more about our products and during this you will learn more about:

- The basic functions of pressure regulators and valves
- Analysis of different models and types
- How to correctly size and specify units
- Identifying problems and ways to rectify performance issues
- Build and repair training exercises



## Tube Fittings Safe Installation Course

This challenging course will explore the many benefits of our tube fittings range and focuses on each aspect needed to achieve right-first-time installations. You will typically learn more about:

- How the Tube Fitting works
- Hands-on Tube Fitting Installation Exercises
- Typical Health & Safety Considerations
- How to Avoid Installation Problems
- Selection and Correct Handling of Tubing
- Tube Burst and Bending Exercises (Practical and Theoretical Examinations)






Pressure Regulators, Self Acting Control Valves,  
Pressure Sensors & Switches, Safety Relief Valves,  
Gauges & Manometers




Flow Meters, Switches & Control Valves, Solenoid  
Valves, UHP & Cryogenic Valves, Excess Flow  
Valves, Filters, Strainers, Pumps & Mixers




Level Sensors, Indicators & Switches, Submersible  
Transducers, Float Valves, Bleeding & Venting  
Valves, Steam & Condensate Traps, Thermocouples



Tube, Pipe, Weld and UHP Fittings, Quick Connects,  
Instrumentation Valves, Bottle Connectors,  
Tubing, Piping & Flexible Hoses



Differential Pressure Sensors, Room Condition  
Monitors, Power Meters, Particle Counters,  
Humidity Sensors & Calibrators



Installation Training, Subassemblies, Valve Sizing,  
Servicing & Repairs, Site Surveys

# BOISWOOD

GAS AND LIQUID CONTROL TECHNOLOGIES

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