



Smart Heat Metering



# PREPAYMENT SOLUTION FOR HEAT NETWORKS

## A simple, secure and scalable metering solution, designed for heat networks

Engineered to benefit both the consumer and heat network operator, vPro2 delivers usage information for community heating and payment options to district and communal schemes, of any size. The Connect 100 acts as a hub within the home, ensuring tamper detection and two-way communication with the heat service provider.

Consumers benefit from a portable and fully functional in-home-display, Pipit 500, allowing them to monitor and control their energy costs.





For new build or retrofit projects



Cost effective



No maintenance required



Multiple ways to top up



Robust and reliable



In-house or outsourced operation



Certified security



Easy and speedy install and commissioning



In-house or outsourced operation



Supports mBus or pulse output heat meters



Puts tenants in control



Provides usage data and alerts



### WHY CHOOSE VPRO2?

## **Durable and dependable**

Thanks to its robust architecture, there's no need for a wired network between multiple systems in properties within the same development. This means no single point of failure (SPOF). If one property experiences problems, the others are protected.

- > A simple wired connection to the energy meter, utilising open-protocol MBus or pulse communications, ensures full data availability and enhanced fraud detection.
- > A multi-network roaming SIM covers a wider area and improves connectivity.
- > In the unlikely case of a disturbance to Secure's main communication engine, a disaster recovery (DR) plan, will ensure you are connected within the hour.
- > Pipit 500 is fully compliant with smart metering industry standards.

#### Simple install and commission

The solution is quick and easy to set up and test using a step-by-step process featured on the device screen; ideal for high volume projects.

- > Onsite power requirements are low, it requires a:
  - > Fused spur socket outlet (unswitched) for the Connect 100.
  - > Three-pin socket for Pipit 500.
- > Suitable for new-build or retrofit projects.

#### **Hassle free maintenance**

Wireless ZigBee communications connect Pipit 500 to the Connect 100, allowing flexibility when designing the layout within your property.

- > Updates firmware remotely using over-the-air (OTA) programming.
- > Pipit 500 can be replaced without the need for an engineer.
- > Transferable protocol means no long-term contracts. You'll always have the freedom to choose the appropriate heating.
- > Low operating costs, and no maintenance required.
- > The solution also offers dual fuel capability when used in conjunction with Secure's smart electricity meters.

#### You are well informed

Our remote diagnostics provide you with real-time, on-demand tenant metering data via Liberty Online, including:

- > Account balances
- > Cumulative register value (kWh) readings
- > Total credit added
- > Cost of monthly consumption
- > Monthly standing charge deduction
- $\rightarrow$  Differential temperature ( $\Delta T$ ) and volume

# SMART HEAT METERING



## Well secured means peace of mind

- > Fully secure and encrypted:
  - Internal Home Area Network (HAN) communication between Pipit 500 and Connect 100.
  - Seneral Packet Radio Service (GPRS) and Wide Area Network (WAN) communication between the Connect 100 and external systems.
- > ISO 27001 certification the internationally recognised best-practice framework for any information security management system (ISMS).
- > Operators can manage their solution(s)
- > via an SSL-encrypted website that also offers two-factor authentication for added security.
- > Payments are transferred securely between our 24/7 back-office solution and each meter.

#### Early fault detection enables a fast response

Notifications of any critical events occurring onsite are sent to you via email. These include:

- > Tamper.
- > Faults.
- > Input of unauthorised vend codes.
- > Exhausted credit.
- Unauthorised attempts to access WAN or GPRS.
- > Configuration changes in heat meter.
- > Communication failure with heat meter.

#### **Convenient for customers**

- > Pipit 500 has a small footprint and is both portable and wireless easy to move from one room to another.
- Sobal or individual messages sent to all or specific customers can be viewed via Pipit 500.
- > Easy to make payments:
  - > flexible and virtually instant payment options; cash, retail outlets, website, phone and text
  - > real-time top-ups
  - In the case of WAN or GPRS disconnection, users can top up manually
  - Each customer can be switched remotely between prepayment and credit mode
  - > Emergency or Friendly Credit options
- > In Credit mode, users can view their current monthly spend in real time
- Debt management options available and able to be tailored to suit individual customer's energy usage and financial needs



### **OUR CREDIT SOLUTIONS**

We offer two credit options that allow customers some flexibility and security when it comes to paying for their heating.

#### **Friendly Credit**

You can set your own Friendly Credit hours, for example; you can specify that if a customer's Emergency Credit runs out during the week after 4pm, their supply won't be interrupted until 10am the following day. Should it run out after 5pm on a Friday, their supply will continue until 10am the following Monday.

Our Friendly Credit period can also cover bank holidays and Christmas, or align to coincide with billing authorities' office hours, removing the need for a 24-hour call centre.

So that makes life a little more secure for them. And metering management a little easier for you.

## **Emergency Credit**

For those times when a customer may be running a little low on credit, the In-Home Display will notify them and give the option of accessing £10 of Emergency Credit, buying them a little more time. Literally.

Any Emergency Credit used will then be deducted from their payment when they next top up.

## **HOW WE WORK**

Working alongside our preferred supply chain partners, we provide the pioneering hardware, technology and best-in-class services for a complete payment collection solution and energy offering.

Whether you want the whole solution or just a billing and metering service, we are the best at what we do.

The following are just a handful of the many ways in which we can help you provide reliable, efficient and sustainable power to your customers:

- > Installation
- > Energy servicing
- > Maintenance and testing
- > Energy supply
- > Debt management
- > CRM / data collection
- > Multiple payment options

