

Liberty Connect 200

A next-generation multi-utility smart metering solution, designed for heat networks.



Part of Secure's proven Liberty Online smart metering platform, Liberty Connect 200 is a compact, next-generation multi-utility* (heat, cooling, hot or cold water) smart metering hub for district and communal heating / cooling networks.

The device connects to third-party heat meters via wired M-Bus and integrates with Heat Interface Units (HIUs)* via Modbus. With secure NB-IoT / LTE Cat-M connectivity, it collects and transmits consumption data to the Head-End System (HES) for billing, monitoring, and management.

Built on open and transferable protocols, Liberty Connect 200 enables seamless integration across AMI platforms, billing systems, and multivendor environments without vendor lock-in. The solution supports modern heat network infrastructure and aligns with evolving UK regulatory frameworks, including the Heat Network Technical Assurance Scheme (HNTAS), upcoming Ofgem heat network regulation, and emerging cybersecurity and data protection requirements.

Liberty Connect 200 helps heat service providers reduce bad debt through automated debt recovery features, flexible billing models, and accurate consumption insights. It also provides residents transparent access to real-time energy consumption data via the Pipit 200 in-home display / Mobile App.



Liberty Connect 200:

Available with Sycous Customer Billing Services.

Our Customer Billing Services allow us to operate some or all of your heat network and private utility network metering, PAYG and data collection systems on your behalf. Backed by our powerful online software platform, Mabdeck, and delivered through our trusted consumer brand, mySycous, our flexible service packages provide a seamless end-to-end solution.



-  **Meter Data Management (MDM)**
We make sure the data you use is valid for charging purposes.
-  **Credit Billing Services**
We generate monthly, quarterly or custom frequency statements to your customers.
-  **PAYG Operation**
We manage all payments and communication with your PAYG units.
-  **Customer Support**
Our team deliver great support to your consumers for their utilities.
-  **Payment Facilities**
Flexible payment options for your customers with cash-collection.
-  **Credit Control**
Proactively reduce your debt risk and minimise bad-debts.
-  **Reporting and Visualisation**
Transparent access to financial and energy data, including efficiencies.
-  **Online Account Management**
By web or mySycous Mobile App for your consumers to manage their accounts.
-  **Tariff Management**
We can help set your tariffs effectively and against industry best practice.

Why choose **Liberty Connect 200?**



Applications

- » District and communal heating / cooling networks (new-build and retrofit).
- » Smart AMR / AMI deployments for operational efficiency.
- » Multi-utility metering for heat, cooling, hot or cold water.
- » HIU-integrated monitoring and diagnostics.



Features

- » Integration with third-party meters via wired M-Bus.
- » NB-IoT / LTE Cat-M WAN communication with BLE HAN interface.
- » Over-the-air firmware update.
- » Mobile App for installers and residents.
- » 10 years no-quibbles warranty.



Next-generation smart heat metering capabilities

- » Flexible billing and tariff management with credit, PAYG, and accounting modes and remote payment mode switching (e.g. prepay / postpaid).
- » Real-time consumption and cost data visibility available via Mobile App and in-home display – Empowers consumers with transparency and control.
- » Interoperable solution with support for multi-vendor AMI platforms, billing systems, and network operators.
- » Advanced fault detection and diagnostics for proactive identification of metering issues, system anomalies and communication failures.
- » Secure remote disconnection / reconnection control protects consumers from unfair service interruption.
- » Granular, revenue-grade data collection, secure local storage, and cloud-based data continuity (5, 10, 15, 30, 60-minute intervals) aligned with HNTAS requirements.
- » Secure by design:
 - App-based and offline OTP authentication mechanisms.
 - AES-128 encrypted end-to-end communication.
 - GDPR-aligned data handling.
 - Protection against interception, spoofing, and tampering.
 - Encrypted control for prepayment applications.



Benefits across the ecosystem

Heat service providers / ESCOs

- » Automated debt recovery.
- » Real-time consumption and financial data visibility.
- » Supports migration from legacy systems to secure smart metering.
- » Streamlined change-of-tenancy process.
- » Network monitoring and proactive maintenance.

Housing associations / local authorities

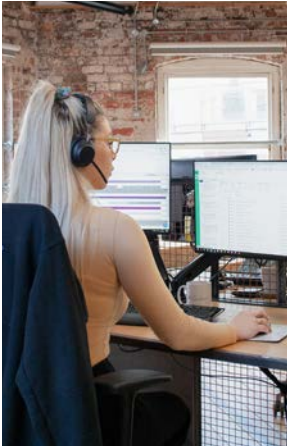
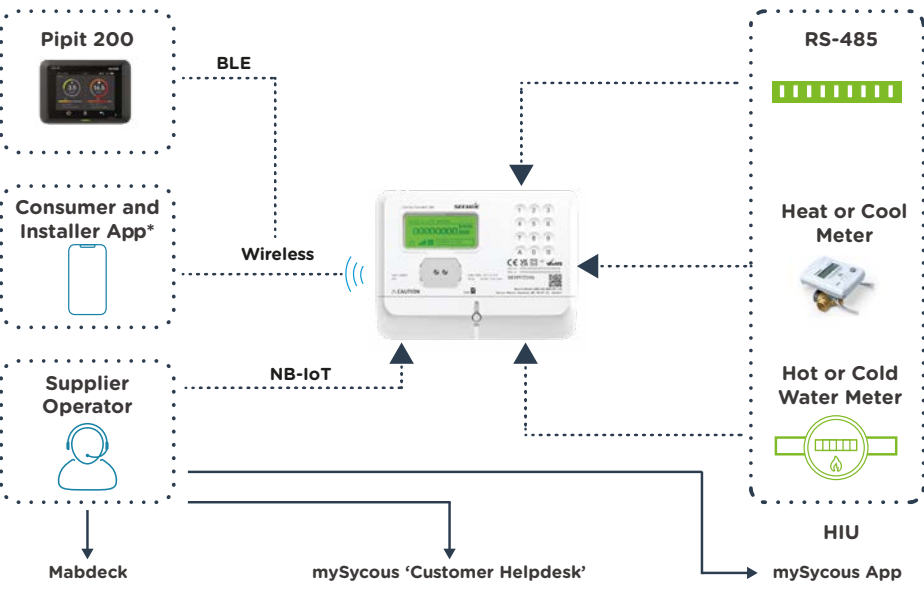
- » Supports compliance with Ofgem metering and billing requirements.
- » Greater transparency for operational, carbon, and financial performance.
- » Low infrastructure cost: a single hub for heat, cooling, hot water, or cold water metering.
- » Reduced infrastructure complexity and deployment cost.

Residents

- » Visibility and better control of energy consumption and costs through the Pipit 200 in-home display / Mobile App.
- » Flexible payment support with friendly credit safeguards.
- » Secure handling of consumption and payment data.

How it works?

This setup enables seamless communication between meters, HIUs, in-home displays, and the Head-End System (HES). Consumers and installers can easily monitor readings on their smartphones.



Technical Specifications

Liberty Connect 200

Mechanical Features	Mechanical Description
Dimensions (L x W x H)	155 x 116 x 56.5 mm (± 1.0)
Weight	0.50 kg (± 0.05) approx.
Sealing Provisions	1 seal on the terminal block cover
Ingress Protection	IP54
Display	» 128 x 64 graphic display with green backlit » Display visibility angles - 15 degrees from all sides
Keypad	Capacitive touch keys 3x4 matrix
SIM Card	Push-push type
Electrical Features	Electrical Description
Power Supply	
Rated voltage	230 V AC, + 30% and -20%
Frequency	50 / 60 Hz $\pm$ 5%
Output power	Continuous 2W, Peak 5W
High voltage isolation	3 kV RMS for 1 min (Primary to secondary)

Relay Specification	
Relay input voltage	12V DC / 24V DC / 110V AC / 230V AC Maximum: 26V DC / 250V AC
Relay contact rating	1250V A, 150W (Maximum switching power)
Dielectric strength	» Between open contacts: 1000V rms for 1 min » Between contact and coil: 4000V rms for 1 min
Type	SPST
Compliance and Regulatory Features	Compliance and Regulatory Description
Directives	
RED	Radio Equipment Directive 2014/53/EU UK regulation S.I 2017 No. 1206
EMC	2014/30/EU UK regulation S.I 2016 No. 1091
RoHS2	2011/65/EU UK regulation S.I 2012 No. 3032
LVD	2014/35/EU UK regulation S.I 2016 No. 1101
REACH	Reg. (EC) No. 1907/2006 UK regulation S.I 2019 No. 758
WEEE	2012/19/EU Waste Electrical and Electronic Equipment Directive UK regulation S.I 2013 No. 3113
Battery Directive	2006/66/EC regulates the manufacture and disposal of batteries in the European Union
Approvals	
Wired M-Bus	EN 13757-2 Physical and link layer (Master) EN 13757-3 Application layer (Master)
Radio	EN 300 328, BLE EN 301 908-1 LTE (NB-1/2 and CAT-M)
EMC	EN 301 489-1
Safety	EN 62368-1

Communication Features	Communication Description
M-Bus interface	» Wired M-Bus (Master) » Supply - 36V DC (Master mode, supports up to three M-Bus devices) » Load - 1 UL / 3UL per slave High Voltage isolation 3 kV for 1 min » M-Bus baud rate - 300-9600 bps (Default 2400)
WAN	» NB-IoT fallback CAT-M » Standard - EN 301908 » Antenna type - Internal PCB antenna and external antenna
HAN	» BLE, 4.2 » Frequency band 2.4 GHz ISM » Output power 5dBm » Standard EN 300 328
Optical interface	Default Baud rate 9600 bps
Environmental Features	Environmental Description
Temperature	Operating (-10°C to +55°C), storage (-25°C to +70°C)
Operating humidity	Up to 95% non-condensing
Life expectancy	10 years

Pipit 200

Features	Description
Dimension	116 x 81 x 40 mm
Weight	0.2 kg approx.
Power consumption	< 0.6 W
Display	Area (74 x 49 mm), resolution (480 x 320 TFT)
Touchscreen	Capacitive type
Material	Acrylonitrile Butadiene Styrene (ABS) / Polycarbonate Flame Retardant (PCFR)
Colour	Black
Replaceable battery	3× AAA alkaline non-rechargeable batteries
Temperature	Operating (-10°C to +50°C), storage (-20°C to +60°C)
Relative humidity	0 to 95%
Ingress protection	IP40
Communication	BLE, 10dBm
Operating life	7 years

* Following features available from October

Want to know more?

Contact our team on **+44 (0) 113 3604 776** or
email **info@sycous.com**.

Visit **sycous.com** to learn more about our
innovative metering, remote data collection and
billing solutions.



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