



# Heat Metering

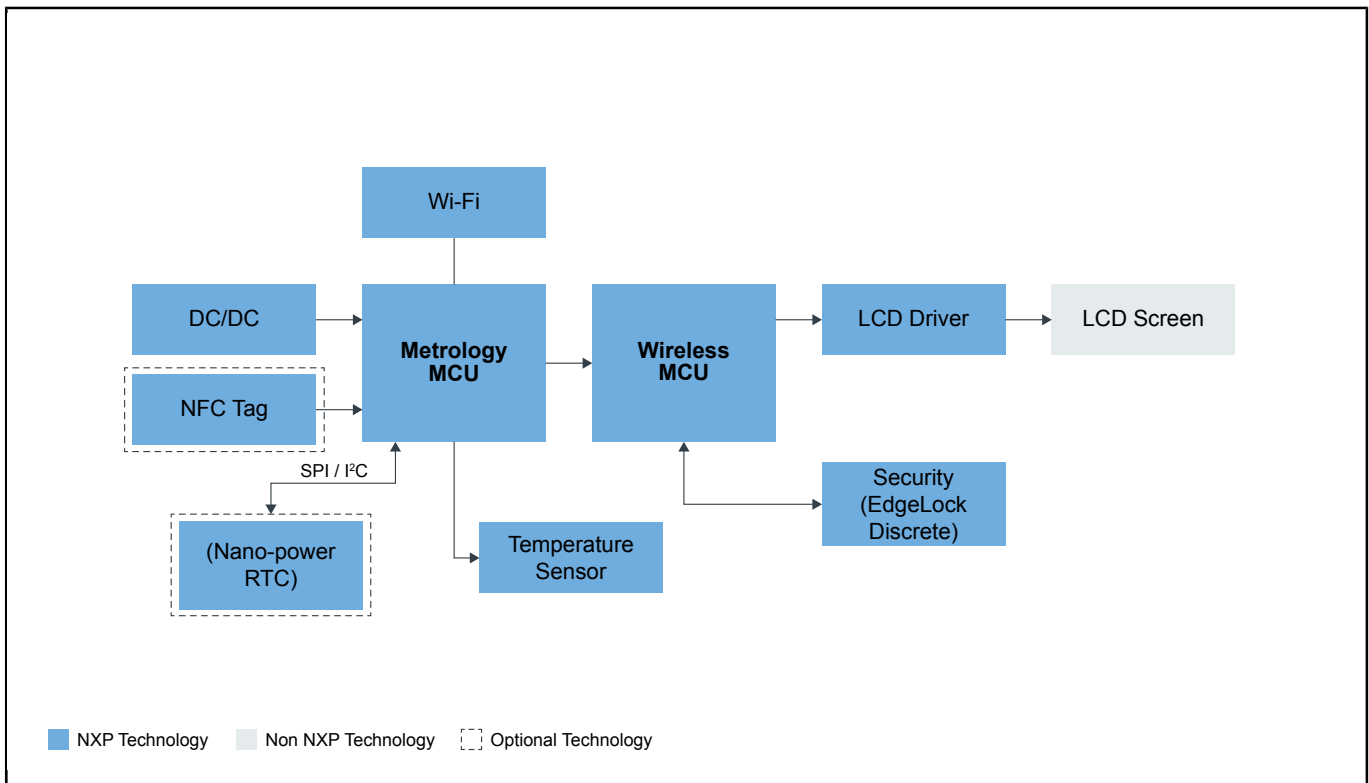
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Modern buildings do a smart regulation of their energy consumption: whether is electricity, ventilation, or heat.

Basically, a heat meter consists of a metrology MCU to measure the inflow and outflow temperatures and volumetric flow of fluid through the pipe. A thermostat regulates the temperature of a system, room or building. Modern systems also compute calculations, are programmable, learn from the habits of users and react to their surroundings.

Our robust EdgeVerse [edge computing](#) portfolio provides MCU, sensor, wireless connectivity, interface solutions, and anti-tamper products for your heat metering applications.

## Heat meter Block Diagram



Recommended Products for Heat meter	
MCU	<ul style="list-style-type: none"> <li>• <a href="#">LPC5500 Arm Cortex-M33</a>: LPC5500 Series: Arm® Cortex®-M33 Based Microcontroller Series for Mass Market, Leveraging 40nm Embedded Flash Technology</li> <li>• <a href="#">K5x Measurement</a>: Kinetis® K5x Measurement Microcontrollers (MCUs) Based on Arm® Cortex®-M4 Core</li> <li>• <a href="#">KM1x</a>: 50 MHz, Mainstream Precision Metrology Microcontrollers based on Arm® Cortex®-M0+</li> <li>• <a href="#">i.MX-RT1020</a>: i.MX RT1020: Crossover MCU with Arm® Cortex®-M7</li> </ul>
Wireless Connectivity MCU	<ul style="list-style-type: none"> <li>• <a href="#">QN9090-30</a>: QN9090/30: Bluetooth Low-Energy MCU with Arm®Cortex®-M4 CPU, Energy Efficiency, Analog and Digital Peripherals and NFC Tag Option</li> <li>• <a href="#">KW41Z</a>: Kinetis® KW41Z-2.4 GHz Dual Mode: Bluetooth® Low Energy and 802.15.4 Wireless Radio Microcontroller (MCU) based on Arm® Cortex®-M0+ Core</li> <li>• <a href="#">JN5189_88_T</a>: JN5189/88 (T): High-Performance and Ultra-Low-Power MCUs for Zigbee® and Thread with Built-In NFC Option</li> </ul>
LCD Driver	<ul style="list-style-type: none"> <li>• <a href="#">PCF85133U</a>: Universal LCD Driver for Low Multiplex Rates</li> </ul>
DC-DC Solutions	<ul style="list-style-type: none"> <li>• <a href="#">Integrated Switching Regulators</a>: Integrated Switching Regulators</li> </ul>
Security (EdgeLock Discrete)	<ul style="list-style-type: none"> <li>• <a href="#">SE050</a>: EdgeLock® SE050: Plug and Trust Secure Element Family – Enhanced IoT security with high flexibility</li> </ul>
NFC Tag	<ul style="list-style-type: none"> <li>• <a href="#">NTAG_I2C</a>: NTAG I²C Plus 2K: NFC Forum Type 2 Tag with I²C Interface</li> </ul>
Temperature Sensor	<ul style="list-style-type: none"> <li>• <a href="#">P3T1035xUK</a>: I3C, I²C-Bus, ±0.5 °C Accuracy, Digital Temperature Sensor</li> <li>• <a href="#">P3T2030xUK</a>: I3C, I²C-Bus, 2.0 °C Accuracy, Digital Temperature Sensor</li> <li>• <a href="#">P3T1084UK</a>: I3C/I²C-Bus ±0.4 °C Accurate Digital Temperature Sensor</li> <li>• <a href="#">P3T1085UK</a>: I3C/I²C-Bus ±0.5 °C Accurate Digital Temperature Sensor</li> <li>• <a href="#">P3T1755DP</a>: I3C/I²C-Bus ±0.5 °C Accurate Digital Temperature Sensor</li> <li>• <a href="#">P3T1750DP</a>: I3C/I²C-Bus, ±1 °C Accuracy, Digital Temperature Sensor</li> <li>• <a href="#">LM75B</a>: Digital Temperature Sensor and Thermal Watchdog</li> <li>• <a href="#">PCT2075</a>: I²C-Bus Fm+, 1 Degree C Accuracy, Digital Temperature Sensor and Thermal Watchdog</li> </ul>
Wi-Fi	<ul style="list-style-type: none"> <li>• <a href="#">88W8977</a>: 2.4/5 GHz Dual-Band 1x1 Wi-Fi® 4 (802.11n) + Bluetooth® 5.2 Solution</li> </ul>
RTC	<ul style="list-style-type: none"> <li>• <a href="#">PCF2131</a>: Nano-Power Highly Accurate RTC with Integrated Quartz Crystal</li> </ul>
RTC	<ul style="list-style-type: none"> <li>• <a href="#">PCF85053A</a>: Bootable CPU RTC with Two I²C Buses, 128 Byte SRAM and Alarm Function</li> <li>• <a href="#">PCF2131</a>: Nano-Power Highly Accurate RTC with Integrated Quartz Crystal</li> </ul>

View our complete solution for [Heat Metering](#).

**Note:** The information on this document is subject to change without notice.

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