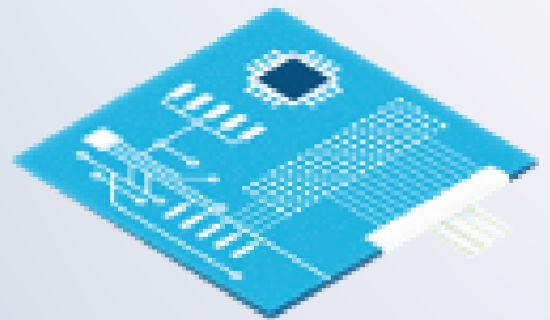# MMB
Wi-SUN SMART METER Explained

The MMB Network Interface Card (NIC) integrates with the smart meter, using either a standard or custom connection, and provides an IP communications tunnel from the meter to the Wi-SUN network.
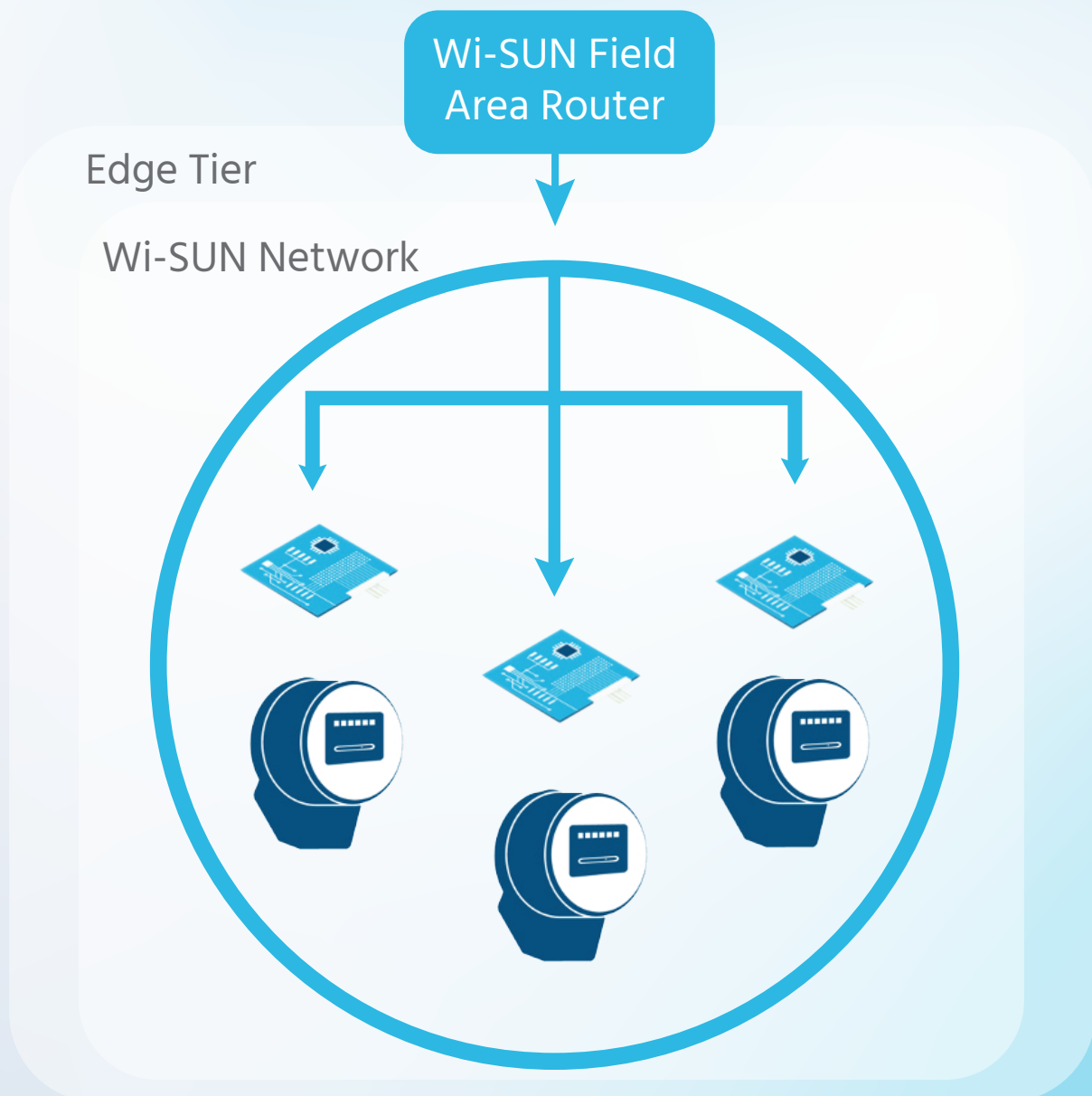
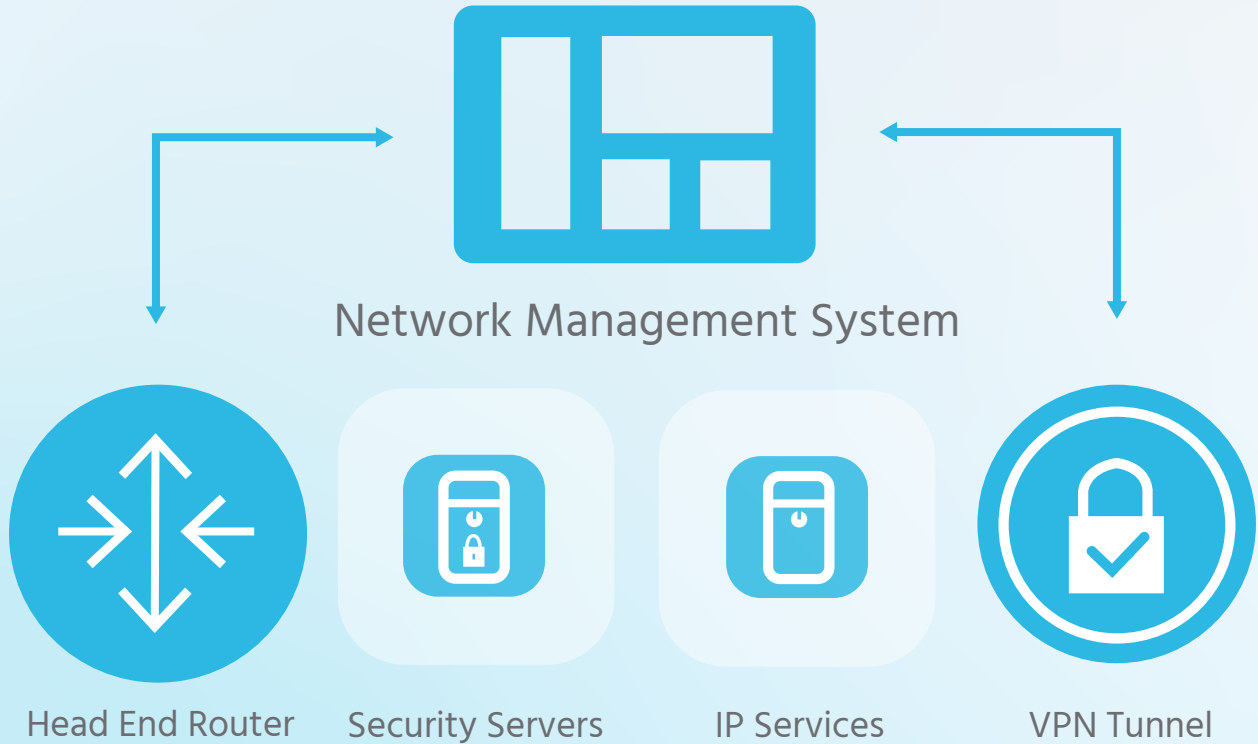Customer Smart
Meter

MMB
Wi-SUN Module

Wi-SUN is a self-healing mesh networking technology, with each mains-powered MMB NIC acting as a router. The Wi-SUN network, sometimes called the field-area network or FAN, is provisioned with one or more Field Area Routers that serve as network concentrators and provide a bridge to external networks like the internet.

Wi-SUN Field Area Router

Edge Tier

Wi-SUN Network

All Wi-SUN Field Area Routers have an IP connection to a dedicated Network Management System (NMS) that handles all device provisioning and security, as well as critical functions like device monitoring and OTA upgrades.

Network Management Platform

Network Management System

Head End Router   Security Servers   IP Services   VPN Tunnel

Finally, the Network Management System provides secure channels to the Meter Data Management System (MDMS), as well as Enterprise-tier utility applications for delivering customer services like dashboards and online billing.

Metering Infrastructure

Metering Data Management System (MDMS)

VPN Tunnel

Metering Head End System

Utility Infrastructure

Utility Data and Services

Customer Services