Enables short-range wireless communication

**Wi-SUN-Compatible Module**

BP35A1

**Class-leading reception sensitivity**

- **Wi-SUN firmware included**
  - Compatible with international wireless communication standards
  - Wi-SUN compliant (Wireless Smart Utility Network)

- Industry-leading receiver sensitivity
  -103dBm (100kbps Typ., BER<0.1%)
  Easy-to-connect specified low power module provides high communication quality.

- Built-in antenna eliminates the need for high-frequency designs

- MAC address included

**High-performance MCU enables compatibility with a variety of HEMS equipment** (via the user-programmable region)

- **Integrated Wi-SUN firmware**
  32bit high power MCU with Wi-SUN-compatible firmware ideal for HEMS applications.

- **Japan Radio Law certified**

- **Pre-adjusted transmitting power**

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**ROHM firmware optimized for HEMS**

1. TTC JJ-300.10 System A
   - Single hop
2. TTC JJ-300.10 System B
   - Multi-hop

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**Featured Products**

BP35A1 and Interface Board

Adopted as a CTBU (Certified Test Bed Unit)
Ideal for communication not only between HEMS and Wi-SUN recommended smart meters but with HEMS-compatible devices as well.

**Wireless LAN Modules**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Supply Voltage (V)</th>
<th>Operating Temp. (°C)</th>
<th>Host CPU Interface</th>
<th>Compatible Standards</th>
<th>Antenna Diversity Compatibility</th>
<th>Integrated System IC</th>
<th>Externa Dimensions (mm)</th>
<th>Package*</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP3580</td>
<td>3.1 to 3.5</td>
<td>-40 to +85</td>
<td>• USB • SDIO • UART</td>
<td>• IEEE802.11b/g/n (Ch1 to Ch13) • IEEE802.11i (Security)</td>
<td>√</td>
<td>-</td>
<td>17.0×17.0×2.3</td>
<td>BU1805GU</td>
</tr>
<tr>
<td>BP3591</td>
<td>3.1 to 3.5</td>
<td>-40 to +85</td>
<td>• USB • SDIO • UART</td>
<td>• IEEE802.11b/g/n (Ch1 to Ch13) • IEEE802.11i (Security)</td>
<td>√</td>
<td>-</td>
<td>24.0×33.1×4.3</td>
<td>BU1805GU</td>
</tr>
<tr>
<td>BP3595</td>
<td>3.1 to 3.5</td>
<td>-40 to +85</td>
<td>• USB • SDIO • UART</td>
<td>• IEEE802.11b/g/n (Ch1 to Ch13) • IEEE802.11i (Security)</td>
<td>√</td>
<td>-</td>
<td>15.3×27.6×2.6</td>
<td>BU1805GU</td>
</tr>
<tr>
<td>BP3599</td>
<td>3.1 to 3.5</td>
<td>-40 to +85</td>
<td>• USB • SDIO • UART</td>
<td>Firmware included</td>
<td>√</td>
<td>√</td>
<td>24.0×33.1×4.7</td>
<td>BU1805GU</td>
</tr>
</tbody>
</table>

*All packages are original power module designs.*

**Application Examples**

- Solar Panel
- LED Lighting
- Controller for Blinds
- AC
- Security Cameras
- Monitor Tablets
- Floor Heaters
- Hot Water System
- Alarms
- Home Chargers
- HEV/EV Chargers

**Specified Low Power Wireless Module**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Supply Voltage (V)</th>
<th>Operating Temp. (°C)</th>
<th>Host CPU Interface</th>
<th>Compatible Standards</th>
<th>Wi-SUN Firmware Support</th>
<th>Antenna Diversity Compatibility</th>
<th>Built-in Antenna</th>
<th>Radio Law Certified</th>
<th>Integrated System IC</th>
<th>External Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP35A1</td>
<td>2.7 to 3.6</td>
<td>-20 to +80</td>
<td>• UART (115,200bps)</td>
<td>• ARIB STD-T108 • IEEE802.15.4/g/e</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>ML7396B (LAPIS Semiconductor)</td>
<td>22.0×33.5×4.9 Connector Type 0.4mm pitch(20pin)</td>
</tr>
</tbody>
</table>