uaGate SI

Gateway for OPC UA and MQTT Communication Upgrade of Siemens Retrofit Plants

- Integration of Modern OPC UA Communication Functionality
- Easy Integration with Siemens PLCs
- Usage of High Security Standards for Protecting Transferred Data

Access to Siemens PLC Data from OPC UA Applications

- Access to SIMATIC S7-300, S7-400, S7-1200 and S7-1500 controllers
- Support of optimized data blocks in SIMATIC S7-1200 and S7-1500 controllers
- Integration of higher-level management systems like ERP, MES or SCADA using integrated OPC UA Server providing open, platform-independent and market-proven communication
- Easy local and global access to field data and routing through firewalls
- Especially dedicated to retrofit upgrades, thus protecting former investments
- No need for software updates, operating system patches and PC updates resulting in years of failure-free operation
- No PLC programming or dedicated PC required

Optimized for Siemens Integration

- Symbolic name import from Siemens TIA Portal and SIMATIC STEP 7 projects
- Namespace configuration by browsing of SIMATIC S7 1200/1500 variables
- Easy setup of OPC UA Server requiring only a few steps for accessing Siemens PLC data
- Web interface for gateway configuration

Industry-proven Security

- Physically separated interfaces and separate configuration rights for OT and IT networks preventing intrusions
- Supporting security standards as SSL/TLS and X.509 certificates
- OPC UA compliant data encryption and user authentification
- Security supported for MQTT communication with private and public clouds
# Technical Data

<table>
<thead>
<tr>
<th><strong>Hardware</strong></th>
<th>Altera Cyclone V SoC with Dual-core ARM Cortex-A9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connectors</strong></td>
<td>2 x IEEE 802.3 100BASE-TX/10BASE-T (independent interfaces)</td>
</tr>
<tr>
<td><strong>Status LEDs</strong></td>
<td>PWR (power supply), RUN (running), ERR (error), SYS (configuration)</td>
</tr>
<tr>
<td><strong>Dimensions (H x W x D)</strong></td>
<td>100 mm x 22.5 mm x 105 mm</td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>18 VDC ... 32 VDC, SELV/PELV supply mandatory, Typically 200 mA, maximum 1 A at switch-on</td>
</tr>
<tr>
<td><strong>Operating Temperature, Horizontal</strong></td>
<td>-40 °C ... 50 °C (0 mm minimum distance)</td>
</tr>
<tr>
<td><strong>DIN Rail Installation</strong></td>
<td>-40 °C ... 55 °C (22.5 mm minimum distance)</td>
</tr>
<tr>
<td><strong>Operating Temperature, Vertical DIN Rail Installation</strong></td>
<td>-40 °C ... 35 °C (0 mm minimum distance)</td>
</tr>
<tr>
<td><strong>Storage Temperature</strong></td>
<td>-40 °C ... 85 °C</td>
</tr>
<tr>
<td><strong>Relative Humidity</strong></td>
<td>10 % ... 90 %, non-condensing</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>About 0.2 kg</td>
</tr>
<tr>
<td><strong>Mounting</strong></td>
<td>DIN Rail (35 mm)</td>
</tr>
<tr>
<td><strong>Housing</strong></td>
<td>Phoenix Contact ME MAX</td>
</tr>
<tr>
<td><strong>Protection Class</strong></td>
<td>IP20</td>
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<tr>
<th><strong>Software</strong></th>
<th>SIMATIC S7, OPC UA (Server, 20,000 items in total), MQTT (Publisher, up to 1,000 topics)</th>
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<tbody>
<tr>
<td><strong>Supported Controllers</strong></td>
<td>Siemens SIMATIC S7-300/400, SIMATIC S7-1200/1500 (including optimized block access), Siemens-compatible controllers like VIPA controllers</td>
</tr>
<tr>
<td><strong>Supported Engineering Tools</strong></td>
<td>SIMATIC STEP 7, TIA-Portal V13/V14/V15 including Service Packs</td>
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<tr>
<th><strong>Conformity</strong></th>
<th>EC Directive 2004/108/EC “Electromagnetic Compatibility”, EN 55011, Group 1, Class A</th>
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<tr>
<td><strong>Immunity</strong></td>
<td>FCC CFR45, Part 15 Section 15.107 and 15.109 (Class A), VCCI Class A Information Technology Equipment 2002</td>
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| **Certifications**    | CE, FCC, RoHS |

## Scope of Delivery

<table>
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<tr>
<th><strong>Hardware</strong></th>
<th>uaGate SI</th>
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<tbody>
<tr>
<td><strong>Software</strong></td>
<td>Tool for configuration over integrated web interface</td>
</tr>
<tr>
<td><strong>Documentation</strong></td>
<td>Quick Startup Guide (printed documentation)</td>
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## Order Numbers

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<thead>
<tr>
<th><strong>Order Numbers</strong></th>
<th>GAA-DX-145111</th>
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