

## RapidSE ESI v1.7.7 Features List

**RapidSE ESI v1.7.7** is an **SEP 1.1** application developed on the **EM357** platform and exercised via the **RapidSE ESI v1.7 Serial Protocol**. It is intended for easy integration with devices that require network coordinator functionality with **ZigBee Pro** and basic **SEP 1.1** compliance.

The application is available in the following flavor configurations (note that **CBKE** flavors may operate with **Test** or **Production Certificates**):

Designation	Profile	Security	Communications	Commissioning
NU	SEP 1.1	APS/Non-CBKE	UART	May commission by <b>Preconfigured Link Key</b> or <b>Installation Code</b>
KU	SEP 1.1	CBKE	UART	May commission by <b>Preconfigured Link Key</b> or <b>Installation Code</b>

The application includes the following features and functionality:

Feature Set	Functionality	Non-CBKE	CBKE
Utility	Reset	✓	✓
	Serial Bootloading	✓	✓
	Firmware Information	✓	✓
	Error Reporting	✓	✓
Device Management	Device Table (Query, Manage and Clear)	✓	✓
	Device Events	✓	✓
	Device Status Query	✓	✓
	Device Bindings Query	✓	✓
	Device Link Key Query	✓	✓
	Device Simple Descriptor Query	✓	✓
	Installation Code Commissioning	✓	✓
	Preconfigured Link Key Commissioning	✓	✓
	Device Decommissioning	✓	✓
ZigBee Network	Form Network	✓	✓
	Permit Joining	✓	✓
	Dissolve Network	✓	✓
	Global Link Key Read/Write	✓	✓
	Network Key Query	✓	✓
	Network Status	✓	✓
Time (Server)	UTC Time and Time Status Read/Write	✓	✓
	Standard and Local Time Read	✓	✓
	Time Zone and DST Read/Write	✓	✓
Demand Response & Load Control (Server)	DLRC Event Start/Cancel/Cancel All	✓	✓
	Local DRLC Attribute Read/Write (Remote via <b>ZCL General</b> )	✓	✓
	Event Status Reports	✓	✓
Price (Server)	Publish Price with <b>Price Acknowledgement (SEP 1.1)</b>	✓	✓
	Assign Price Tier Labels	✓	✓
Message (Server)	Message Display/Cancel	✓	✓
	Message Confirmation	✓	✓
	Message Fragmentation (Payload of up to <b>150 bytes</b> )	✓	✓
Simple Metering (Server)	Reading Information	✓	✓
	Time of Use Information	✓	✓
	ESP Historical Consumption	✓	✓
	Meter Status	✓	✓
	Load Profile Configuration	✓	✓
	Formatting	✓	✓
Key Establishment	CBKE with ECC ( <b>Test</b> or <b>Production Certificate</b> )		✓
ZCL HVAC (Client)	Thermostat Settings Read/Write	✓	✓
	Thermostat Information Read	✓	✓
	Thermostat Temperature Read	✓	✓
ZCL Measurement and Sensing (Client)	Temperature Measurement Attributes Read	✓	✓
ZCL Identify (Client)	Identify Request	✓	✓
ZCL General	Remote and Local Attribute Read/Write	✓	✓
ZigBee Application Support Layer	Security Options (Enforce Device Table)	✓	✓
Custom Profiles and Messages	Custom Profile ID Read/Write	✓	✓
	Message Transmit/Receive	✓	✓
Flow Control	Serial Flow Control Scheme	✓	✓