

GKW-1000Z
KeyWe Smart Lock (Rim Lock Type)

Z-Wave Manual

Ver 1.0

Exterior Parts



Interior Parts



The GWK-1000Z Z-Wave is a secure electronic door lock that supports the Z-Wave Plus standard, which is compatible with earlier versions of Z-Wave. A security enabled Z-Wave controller must be used. The GWK-1000Z supports the standard security S0 and the new security standard S2. The GWK-1000Z can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

Z-Wave Specifications

- Device Type : Door Lock–Keypad (SPECIFIC_TYPE_SECURE_KEYPAD_DOOR_LOCK)
- Role Type : LSS (Listening Sleeping Slave)
- Command Class Support/Control

Z-Wave add/inclusion and remove/exclusion

Please proceed with the door lock open.

- To add or include the GWK-1000Z into a Z-Wave network
 1. Set the controller in inclusion mode.
 2. Open the battery cover of the indoor body and press the [REG] button.
 3. Press the Master Pin [1][2][3][4] (Default value) button after pressing the [#] button.
 4. Press the [8][8] button after pressing the [*] button.
- To remove or exclude the GWK-1000Z into a Z-Wave network
 1. Set the controller in exclusion mode.
 2. Open the battery cover of the indoor body and press the [REG] button.
 3. Press the Master Pin [1][2][3][4] (Default value) button after pressing the [#] button.
 4. Press the [9][9] button after pressing the [*] button.

Factory Reset

Please proceed with the door lock open.

Please use this procedure only when the primary controller is missing or otherwise inoperable.

- To Factory Reset
 1. Open the battery cover of the indoor body and press the [REG] button.
 2. Press the Master Pin [1][2][3][4] (Default value) button after pressing the [#] button.
 3. Press the [5] button after pressing the [*] button.
 4. Press the [5] button after pressing the [*] button.
 5. Press the Master Pin [1][2][3][4] (Default value) button after pressing the [#] button.

* Master Pin can be changed by user setting.

Voltage

- 4 AA Alkaline 1.5V Batteries(6V)

Supported Command Class

| Command Class | Version | Not added | Non-Secure added | Securely added | |
|-----------------------|---------|-----------|------------------|----------------|-----------|
| | | | | Non-secure CC | Secure CC |
| Z-Wave Plus Info | 2 | Support | Support | Support | |
| Transport Service | 2 | Support | Support | Support | |
| Security 0 | 1 | Support | Support | Support | |
| Security 2 | 2 | Support | Support | Support | |
| Association | 2 | | | | Support |
| Association Grp Info | 1 | | | | Support |
| Battery | 1 | | | | Support |
| Device Reset Locally | 1 | | | | Support |
| Door lock | 2 | | | | Support |
| Firmware update MD | 4 | | | | Support |
| Manufacturer Specific | 2 | | | | Support |
| Notification | 8 | | | | Support |
| Power level | 1 | | | | Support |
| Supervision | 1 | | | | Support |
| User Code | 1 | | | | Support |
| Version | 2 | | | | Support |

Association CC V2

Association Group

- The GKW-1000Z supports two association groups:
 - > Group 1 is the Lifeline group. It can contain up to 5 nodes. The Lifeline group on this lock is used to report door lock operation report, and device reset locally notifications to nodes on the group list.

Battery CC(V1)

The Battery Get request can be used to get the status of the battery.
When battery level is low a battery warning is send to the controller.

Door Lock(V2)

- Door Lock Operation is used to lock and unlock the GWK-1000Z.
- See table to see how the Door Lock Mode parameter affects the lock.

| | Secured | Unsecured |
|----------------|---------|-----------|
| Door Lock Mode | 0xFF | 0x00 |

In a Door Lock Operation Report the GWK-1000Z will report.

| Door Status | | Unlocked | Locked |
|----------------------|------------------|--------------------------|--------|
| Door Lock Mode | | 0x00 | 0xFF |
| Handles | | 0x00 | 0x00 |
| Door Condition | Bit 0 : Door | 0 : Open, 1 : Close | |
| | Bit 1 : Deadbolt | 0 : Locked, 1 : Unlocked | |
| Lock Timeout Minutes | | 0xFE | |
| Lock Timeout Seconds | | 0xFE | |

Firmware Update Meta Data(V4)

The GWK-1000Z supports firmware update of the Z-Wave module over the air.

The firmware upgrade takes ~30 min with S0 and ~20 min with S2

Firmware ID = 0x2801.

Firmware 0 ID = 0x0101.

Manufacture Specific(V2)

| | Value | Comment |
|-----------------|--------|---------------------|
| Manufacturer ID | 0x037B | KeyWe, Inc. |
| Product Type ID | 0x0003 | Rim Lock(GWK-1000Z) |
| Product ID | 0x0001 | Door Lock Key Pad |

Notification(V8)

The Notification CC is implemented as a push only, which means only pushes notification to the controller.

Sequence number is not supported.

| | Supported notifications | | |
|----------------------|-------------------------|------------------|---|
| Notification Type | Event | State Parameters | Comments |
| Access Control(0x06) | 0x01 | | User O/C button used to lock the door. |
| | 0x02 | | User O/C button used to unlock the door. |
| | 0x03 | | BLE or Z-wave used to lock the door. |
| | 0x04 | | BLE or Z-wave used to unlock the door. |
| | 0x05 | | User Keypad used to lock the door. |
| | 0x06 | | User Keypad used to unlock the door. |
| | 0x09 | | The Auto Latch time has locked the door. |
| | 0x0B | | Lock jammed. |
| | 0x0C | | All user codes deleted. |
| | 0x0D | | Single user code deleted |
| | 0x0E | | New user code added. |
| | 0x0F | | New user code not added due to duplicated code. |
| | 0x18 | | Door knob is open. |
| | 0x19 | | Door knob is close. |
| | Home Security(0x0A) | 0x01 | |
| 0x02 | | | Contact fire service |

Power Level(V1)

Can be used under inclusion to test signal strength from the controller and to the device.

Security(V1)

See Z-Wave documentation.

Security(V2)

The GWK-1000Z support S2_ACCESS security class.

Supervision(V1)

See Z-Wave documentation.

Transport Service(V2)

See Z-Wave documentation.

User Code(V1)

Lock will accept maximum 20 pin codes that are 4-10 digits in length.

- Support Users : 20
- ID Range : 1~20

Version(V2)

This command Class is used to get information about which version of the different command classes the GWK-1000Z supports and the software version of the GWK-1000Z.

| Version Report | |
|-----------------------------|-----------------------------|
| Z-Wave Library Type | ZW_LIB_SLAVE_ENHANCED(0x03) |
| Z-Wave Protocol Version | 0x04(SDK v6.71.01) |
| Z-Wave Protocol Sub Version | 0x3D(SDK v6.71.01) |

1) Firmware 0 Version

Version of the firmware on the Z-Wave module

| Version | Subversion | Comments |
|---------|------------|---------------|
| 1 | 0 | First Release |

2) Firmware 1 Version

Version of the firmware on the Host(GWK-1000Z)

| Version | Subversion | Comments |
|---------|------------|---------------|
| 1 | 0 | First Release |

3) Hardware Version

| | |
|------|-----------|
| 0x01 | GKW-1000Z |
|------|-----------|

Z-Wave Plus Info(V2)

| | |
|------------------|---|
| Z-WAVE Plus Info | |
| Role Type | 0x07 ROLE_TYPE_SLAVE_SLEEPING_LISTENING |
| Node Type | 0x00 NODE_TYPE_ZWAVEPLUS_NODE |
| Icon Type | 0x0300 ICON_TYPE_GENERIC_DOOR_LOCK_KEYPAD |
| User Icon Type | 0x0300 ICON_TYPE_GENERIC_DOOR_LOCK_KEYPAD |