PDS-100

PHILIA Door Lock

Manual

Ver 1.0

Exterior Parts

Interior Parts

Deadbolt

The PDS-100 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 use. The PDS-100 supports the standard security S0 and the new security standard S2.

The PDS-100 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 Cass Support/Control

Z-Wave add/inclusion and remove/exclusion
Please proceed with the door lock open.
● To add or include the PDS-100 into a Z-Wave network
    1. Set the controller in inclusion mode.
    2. Press the [R] button for 7 seconds.
    3. Press the [1][4][7] button after pressing the [R] button.
● To remove or exclude the PDL-1000 into a Z-Wave network
    1. Set the controller in exclusion mode.
    2. Press the [R] button for 7 seconds.
    3. Press the [3][6][9] button after pressing the [R] 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. Press the [R] button for 9 seconds.
    2. Press the [1][2][3][6][5][4][7] button after pressing the [R] button.

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	3				Support

Association(V2) & Association Group Information(V1)

- The PDS-100 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.

  -> Group2 is the Doorlock Op group. It can contain up to 5 nodes. The Doorlock Op group on this lock is used to report door lock operation 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 PDS-100.

  - 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 PDL-1000 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 PDS-100 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	0x0366	Philia Technology.co.Ltd
Product Type ID	0x0001	PDS-100
Product ID	0x0001	DoorLockKeyPad

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(key) is open.
	0x19		Door knob(key) is close.
Home Security(0x0A)	0x01		Contact police
	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 PDS-100 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 10 pin codes that are 4-10 digits in length.

 - Support Users : 10
 - ID Range : 1~10

Version(V3)

This command Class is used to get information about which version of the different command classes the PDS-100 supports and the software version of the PDS-100.

Version Report	
Z-Wave Library Type	ZW_LIB_SLAVE_ENHANCED(0x03)
Z-Wave Protocol Version	0x05(SDK v6.71.03)
Z-Wave Protocol Sub Version	0x03(SDK v6.71.03)

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(PDL-1000)

Version	Subversion	Comments
1	0	First Release

3) Hardware Version

0x01	PDS-100

Z-Wave Plus Info(V2)

Z-WAVE Plus Info	
Role Type	0x07 ROLE_TYPE_SLAVE_SLEEPING_LISTENIGN
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