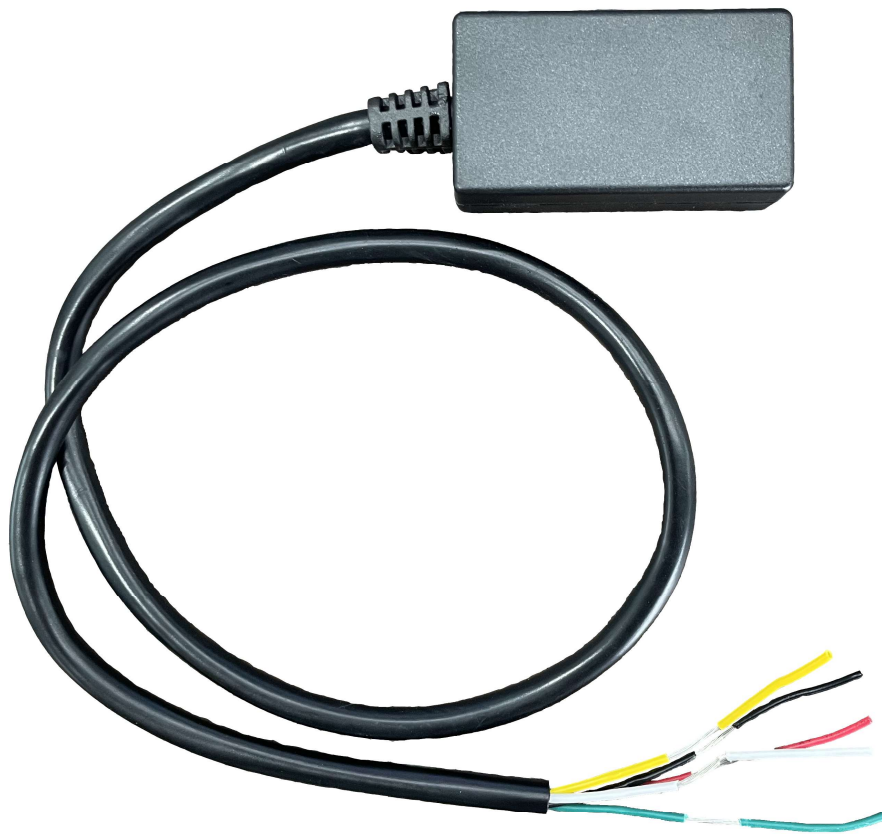


BRY100

V1.0



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1. Revision History

Revision	Date	Author	Description of Change
1.00	2022-03-25	Tomliu	Initial

2. Product introduction

BRY100 is professional wireless BLE 5.1 Relay applications. The Bluetooth broadcast frequency is 100 milliseconds.

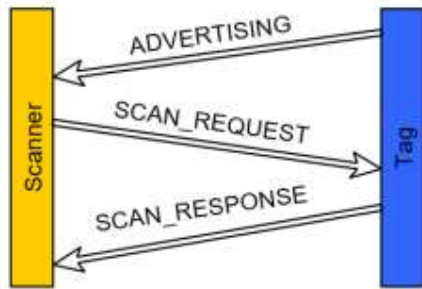
3. Product features

Compact Size
Easy installation
IP64
BLE 5.1
BLE/Remote Control
Firmware Over the Air

4. Product characteristics

PN	BRY100
Industrial grade	IP64
Shell material	ABS plastic
Shell color	black
Dimensions	49mm*27mm*16mm
Product weight	22g ± 1g
Operating Voltage	DC 8 ~ 32V
StandbyCurrent	< 1mA @12V&24V
TriggerCurrent	17mA@12V / 10mA@24V
Maximum Load Current	6A@250VAC / 6A@30VDC
The Max Switch Voltage	400VAC/125VDC
The Max Switch Current	6A
The Max Switch Power	1500VA/180W
Operatingtemperature	-40°C~+85°C
Transmission Range	Up to 300m (Open Field)

5. Advertising Definition



5.1 “BLE Relay” Format

Bytes	Frame Type	Value
1	Length	0x02
2	Type	0x01
3	Data	0x06
4	Length	0x08
5	Type	0x16
6	Relay Serve LOW	0x03
7	Relay Serve MSB	0x2A
8	Relay Output State	0x01
9	Reserved	
10	Reserved	
11	Reserved	
12	Reserved	
13	Reserved	
14	Length	<=10
15	Type	0x09
16	NAME[0]	
17	NAME[1]	
18	NAME[2]	
19	NAME[3]	
20	NAME[4]	
21	NAME[5]	
22	NAME[6]	
23	NAME[7]	
24	NAME[8]	
25	NAME[9]	
26	NAME[10]	

27	NAME[11]	
28	NAME[12]	
29	NAME[13]	
30	NAME[14]	

6. Service Definition

Service Definition	
Control Service	
Service UUID	0000 2e00 -0000-1000-8000-00805f9b34fb
Characteristic1	
Read UUID	0000 2e21 -0000-1000-8000-00805f9b34fb
Max Length	180 Byte
Characteristic2	
Write UUID	0000 2e22 -0000-1000-8000-00805f9b34fb
Max Length	180 Byte

7. Command

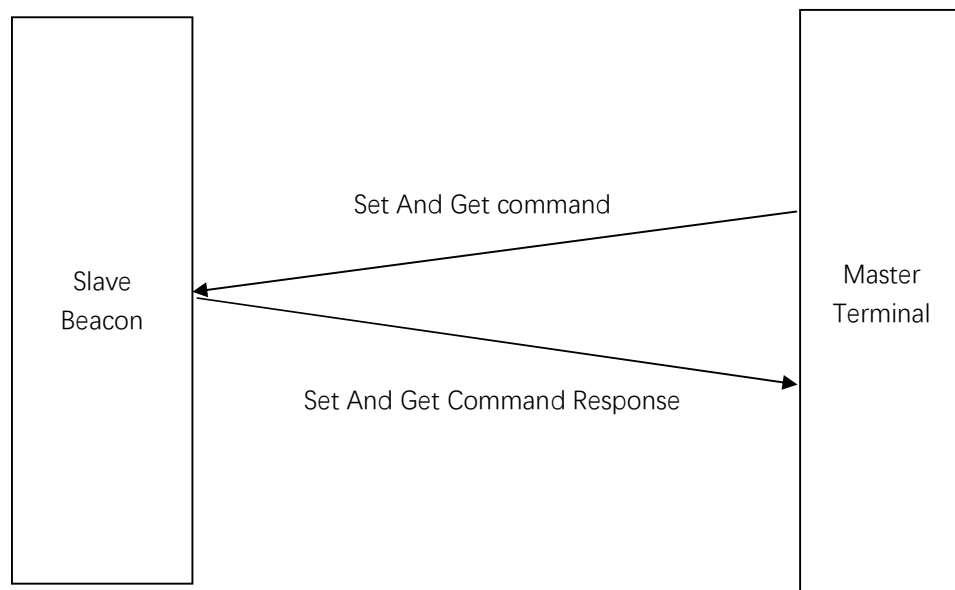
7.1 Command Format

All the commands use ASCII characters. Each command has the following format:

Command Format	Command Type
AT@SET=<param1>,<param 2>,...<param N>#	Set Parameters Command
@SET:<param 1>,<param 2>,...<param N>#	Set Parameters Command Response
AT@GET=<param 1>,<param 2>,...<param N>#	Get Parameters Command
@GET:<param 1>,<param 2>,...<param N>#	Get Parameters Command Response

The "<param 1>,<param 2>,...<param N>" carries the command's parameters. The ASCII character ',' is used to separate the parameter characters. The parameter string consists of the ASCII characters: '0'-'9', 'A'-'Z', 'a'-'z'. The ending of command with character '#'.

Please refer to the following flow chart figure:



7.2 Error Code

The error code indicates the result of command execution.

Error Code	Description
0	Command Executed Successful
1	Operation Not Allowed
2	Invalid parameter

7.3Set Command

7.3.1 Password Authorization

The **AT@SET=1** command is used to password authorization.

Example: AT@SET=1,123456#				
SN	Parameter	Length (Byte)	Range/Format	Default
1	Command ID	1	'1'	'1'
2	Password	<=6	'0' – '9' 'A' – 'Z' 'a' – 'z'	
3	Tail Character	1	#	#

- ✧ <Command ID>: This is ID number of command and the ID number is unique.
- ✧ <password>: The password for authorization, the default password is "123456". If the password authorization failed, the beacon will reject any commands and the response error code is 1 (Operation Not Allowed).

The response of AT@SET=1 command:

Example: @SET:1,0#				
SN	Parameter	Length (Byte)	Range/Format	Default
1	Command ID	1	'1'	'1'
2	Result	1	Please refer to the below "Error Code"	
3	Tail Character	1	#	#

7.3.2Change Password

The **AT@SET=2** command is used to change password.

Example: AT@SET=2,123456#				
SN	Parameter	Length (Byte)	Range/Format	Default
1	Command ID	1	'2'	'2'
2	Password	<=6	'0' – '9' 'A' – 'Z' 'a' – 'z'	
3	Tail Character	1	#	#

The response of AT@SET=2command:

Example: @SET:2,0#				
SN	Parameter	Length (Byte)	Range/Format	Default
1	Command ID	1	'2'	'2'
2	Result	1	Please refer to the below "Error Code"	
3	Tail Character	1	#	#

7.3.3 Disable Relay

The **AT@SET=5** command is used to disable relay.

Example: AT@SET=5 #				
SN	Parameter	Length (Byte)	Range/Format	Default
1	Command ID	1	'5'	'5'
2	Tail Character	1	#	#

The response of AT@SET=5 command:

Example: @SET:5,0#				
SN	Parameter	Length (Byte)	Range/Format	Default
1	Command ID	1	'5'	'5'
2	Result	1	Please refer to the below "Error Code"	
3	Tail Character	1	#	#

7.3.4 Enable Relay

The **AT@SET=6** command is used to enable relay.

Example: AT@SET=6#				
SN	Parameter	Length (Byte)	Range/Format	Default
1	Command ID	1	'6'	'6'
2	Tail Character	1	#	#

The response of AT@SET=6 command:

Example: @SET:6,0#				
SN	Parameter	Length (Byte)	Range/Format	Default
1	Command ID	1	'6'	'6'
2	Result	1	Please refer to the below "Error Code"	
3	Tail Character	1	#	#

7.4 Get Command

7.4.1 Get Password

The **AT@GET=1** command is used to get current password.

Example: AT@GET=1#				
SN	Parameter	Length (Byte)	Range/Format	Default
1	Command ID	1	'1'	'1'
2	Tail Character	1	#	#

✧ <Command ID>: This is ID number of command and the ID number is unique.

The response of AT@GET=1 command:

Example: @GET:1,0,123456#				
SN	Parameter	Length (Byte)	Range/Format	Default
1	Command ID	1	'1'	'1'
2	Result	1	Please refer to the below "Error Code"	
3	Password	<=6	'0' – '9' 'A' – 'Z' 'a' – 'z'	
4	Tail Character	1	#	#

7.4.2Get Version Information

The **AT@GET=2** command is used to get version information.

Example: AT@GET=2#				
SN	Parameter	Length (Byte)	Range/Format	Default
1	Command ID	1	'2'	'2'
2	Tail Character	1	#	#

✧ <Command ID>: This is ID number of command and the ID number is unique.

The response of AT@GET=2command:

Example: @GET:2,0,000101#				
SN	Parameter	Length (Byte)	Range/Format	Default
1	Command ID	1	'2'	'2'
2	Result	1	Please refer to the below "Error Code"	
3	Software Version	<=6		
4	Tail Character	1	#	#

8. operating instructions