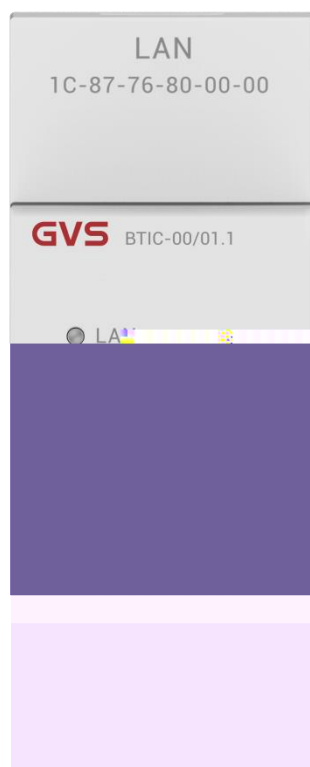


 **KNX-MQTT-HA** ☐

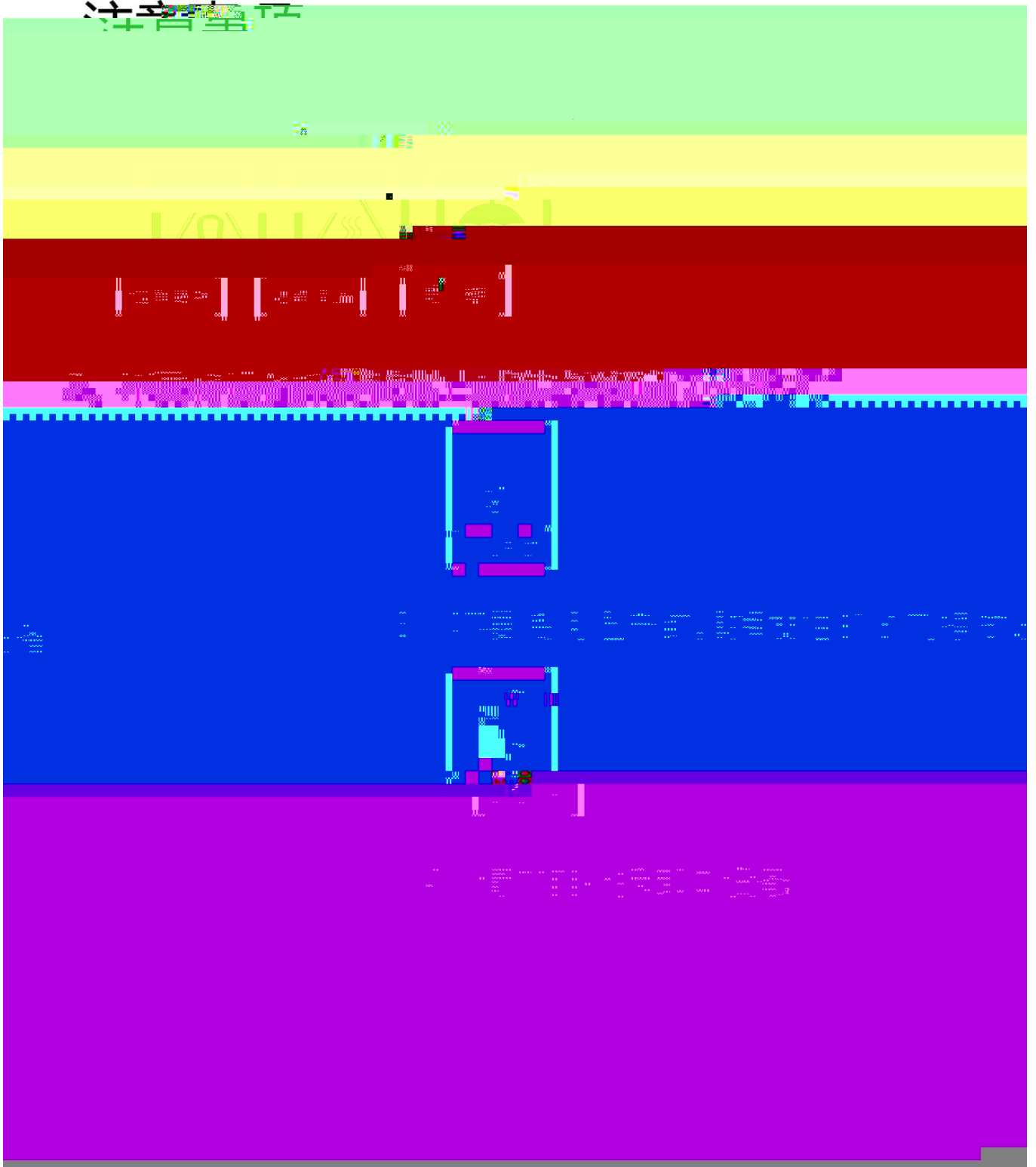
KNX-MQTT-HA Gateway_V1.1

BTIC-00/01.1



KNX/EIB





R

5.2. ☐ ☐ ☐ "Select Options"lect... l 9

KNX/EIB

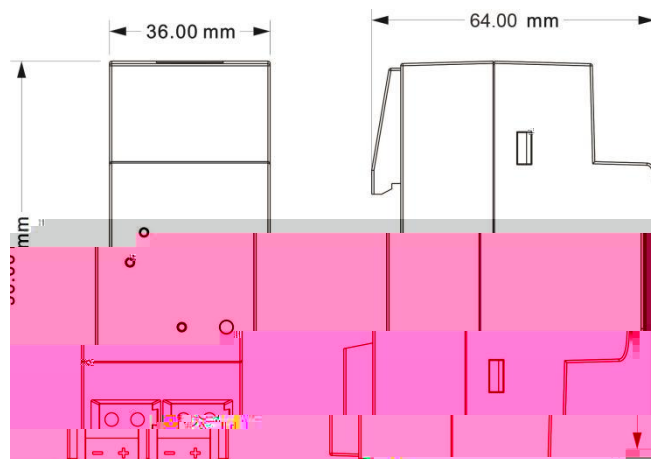
KNX-MQTT-HA

□ □

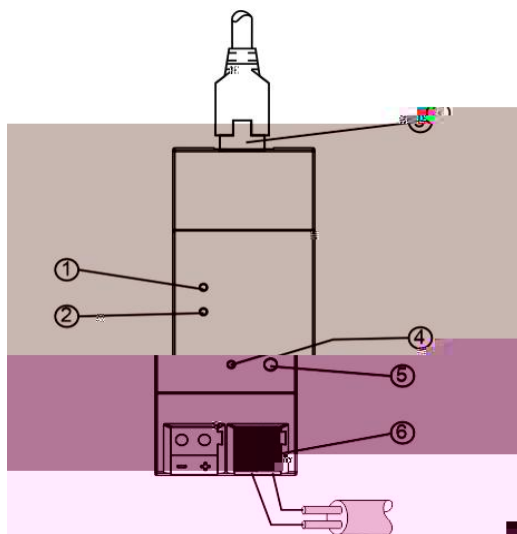
□	21-30V DC, □ □ KNX □ □
□	19.5mA/24V □ 15.5mA/30V
□ □	470mW
□ KNX	□ □ □ (□ / □)
LAN	RJ45 □ 10/100 Base-T
LAN LED	: □ □ □ □: □ □ □ □ □ □
KNX LED	: □ KNX □ □ □: □ □
□ □ □ □ LED	□
□ □ □	– 5 °C ... 45 °C
	– 25 °C ... 55 °C
□ □	– 25 °C ... 70 °C
	<93% □ □ □
□ DIN □ □ □ 35mm □ □ □	
	36 × 90 × 64mm
□ □	0.1kg

□ □ □

3.1.



3.2. □



LAN LED

4 □ LED

f KNX LED

□ □

h LAN □

3 KNX □ □ □

□ □ □

□ □ □ □ □

□ □ 4 □ □ □ 4 □

□ 3 □



KNX/EIB

KNX-MQTT-HA ☐

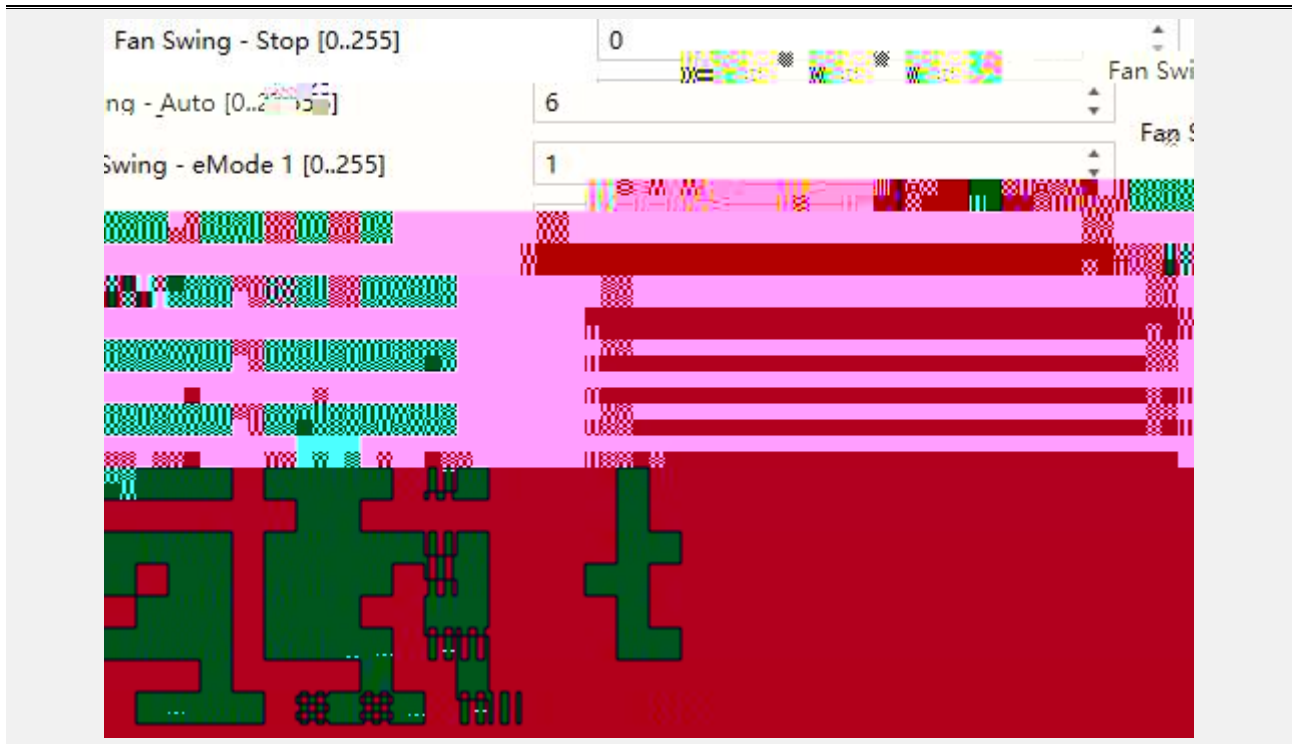
☐ ☐ ☐ ☐ ☐

	☐ ☐ ☐	☐	☐	☐
KNX-MQTT-HA Gateway/00D8 1.0	1691	2048	2048	768

5.1.2.AC KNX

The following AC exchanges data with the KNX bus

Mode - auto [0..255]	0
Mode - heat [0..255]	1
Mode - cool [0..255]	3
Mode - fan only [0..255]	9
Mode - eMode 1 [0..255]	18



5.1.2 "General setting"

□ □ □

The following AC exchanges data with the KNX bus

AC □

KNX □

□ □ □ □ □

"Mode - ... [0..255]"

□ □ □ □ □ □ □ □ 0..255

"Fan Speed - ... [0..255]"

□ □ □ □ □ □ □ □ 0..255

"Fan Swing - ... [0..255]"

□ □ □ □ □ □ □ □ 0..255

"Temperature Min.[10..32]"

"Temperature Max.[10..32]"

□ □ □ □ □ □ □ □ k □ □ □ □ □ □ □ □ k

□ □ □ 10..32 -C

□ □ □ □ □ k



KNX/EIB

KNX-MQTT-HA ☐

"...eMode.x desc."

☐

☐ ☐ ☐

x ☐ eMode.x ☐

☐ ☐

☐ 8

☐ k

5.2. "Select Options"

Number of templates

5.2 "Select Options"

"Number of templates"

KNX-MQTT-HA

k 1...8

5.2.1. "Select Template x x=1~8"

Number of options

Option 1 description

Option 1 value

Option 2 description

Option 2 value

Option 3 description

Option 3 value

Option 4 description

Option 4 value

5.2.1 "Select Template x"



KNX/EIB

KNX-MQTT-HA ☐

"Number of options"

☐ ☐ ☐ ☐ ☐ k ☐ ☐ ☐ **1...8**

"Option x description"

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ **14** ☐ k

--- "Option x value"

☐ ☐ ☐ ☐ KNX k ☐ ☐ **0...255**

5.3. "Sensor, Select..."

Number of channel (sensor, select, input, value sender)		1
function for channel	binary input	
function		
binary input	value reverse	☐ yes
... binary input object type	1bit	
function icon	Default	

5.3 "Sensor, Select..."

"Number of channel (sensor, select, input, value sender)"

0...100

"Function for channel"

5.3.4.Select

Function of channel

Select

Function name

Select template

1

Function icon

Default

5.3.4 "select" □ □ □

"= 0



KNX/EIB

KNX-MQTT-HA ☐

5.4. ☐ ☐

KNX/EIB

KNX-M

5.4.2.Curtain

Function of channel	Curtain
Function name	
Position control and status	☒ Disable ☐ Enable
Function icon	Default

5.4.2 "curtain"

"Position control and status"

☐ ☐ 1byte ☐ ☐ ☐ ☐ k ☐ ☐ ☐

Disable

Enable

5.4.3.Scene

Function of channel	Scene
Function name	
Object type of scene 1	<=6bit value
Scene 1 value	0
Object type of scene 2	<=6bit value
Scene 2 value	0
Object type of scene 3	<=6bit value
Scene 3 value	0
Object type of scene 4	<=6bit value
Scene 4 value	0
Object type of scene 5	<=6bit value
Scene 5 value	0
Object type of scene 6	<=6bit value
Scene 6 value	0
Function icon	Default

5.4.3 "scene"

"Object type of scene x"

□ □ x □ □ □ x=1~6^k □ □ □

no

<=6bit value

1byte value[0...255]

2byte value[0...65535]

2byte float value

"Scene x value"

□ □ x □^k □ □ □ □ □ □^k

5.4.4.Valve

Function of channel

Valve

Function name

Position control and status

☒ Disable ☐ Enable

Function icon

Default

5.4.4 "valve"

□ □ □

"Position control and status"

□ □ □ 1byte □ □ □ □ □ □^k □ □ □

Disable

Enable

5.5. □ □ □ “Switch...x □ x=1~100 □”

Number of Switch

1

Function of channel

☐ Inactive ☒ Active

Function name

Function icon

Default

5.5 “Switch...x” ☐ ☐ ☐

"Number of Switch"

□ □ □ □ □ □ k □ □ □ **0...100**

“Function for channel”

□ □ □ □ □ □ □ □ □ **100** □ k □ □ □

Inactive ☐

Active

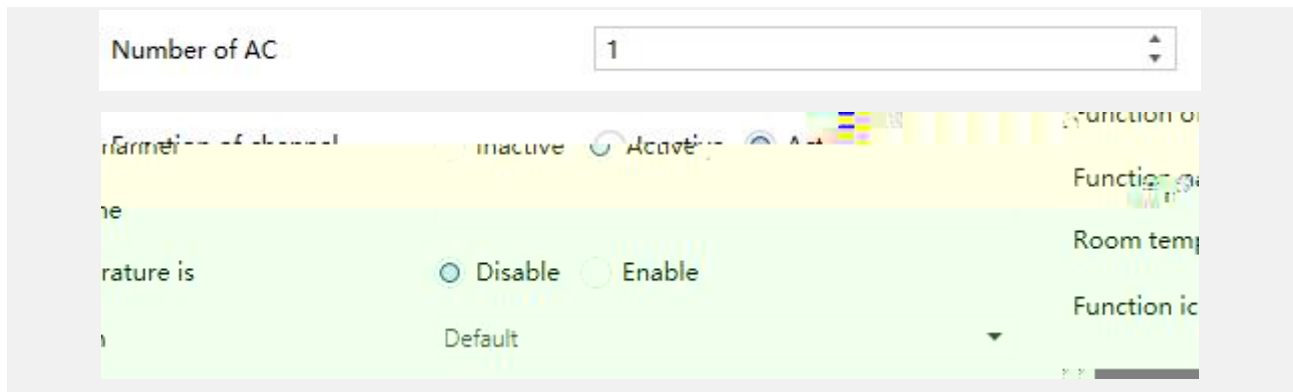
"Function name"

☐ ☐ ☐ ☐ ☐ ☐ k ☐ **14** ☐ k

“Function icon”

□ □ □ □ □ k □ □ □ “Home Assistant” k

5.6. "AC...x" x=1~16



5.6 "AC...x" x=1~16

"Number of AC"

AC x k 0...16

"Function for channel"

AC x k 16 AC x k

Inactive

Active

"Function name"

AC x k 14 k

"Room temperature is"

k k k

Disable

Enable

"Function icon"

k k k "Home Assistant" k

5.7. (tunneling)

KNX-MQTT-HA 5 5.7.1 ETS

Visualization APP (Smartphone) (Tablet) (Bus tool)

k



5.7.1

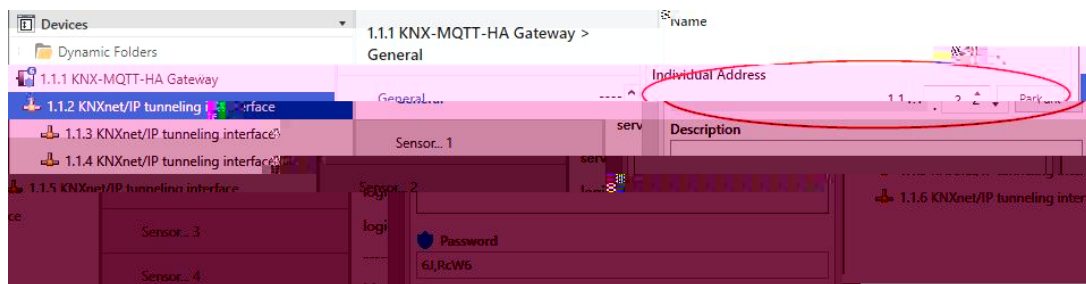
ETS5 5

ETS5 5

k

Park 5.7.2

15.15.255 Park 15.15.255 k 15.15.255

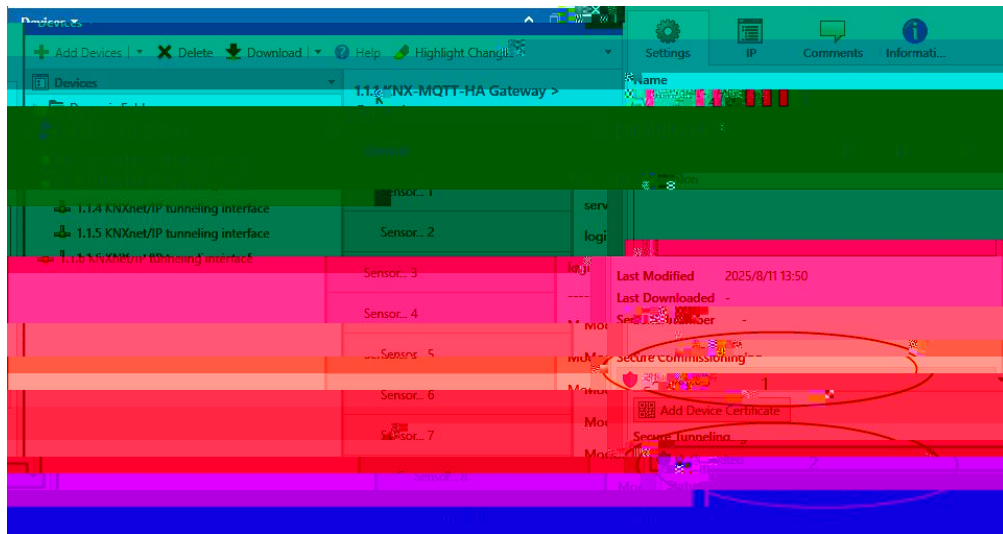


5.7.2

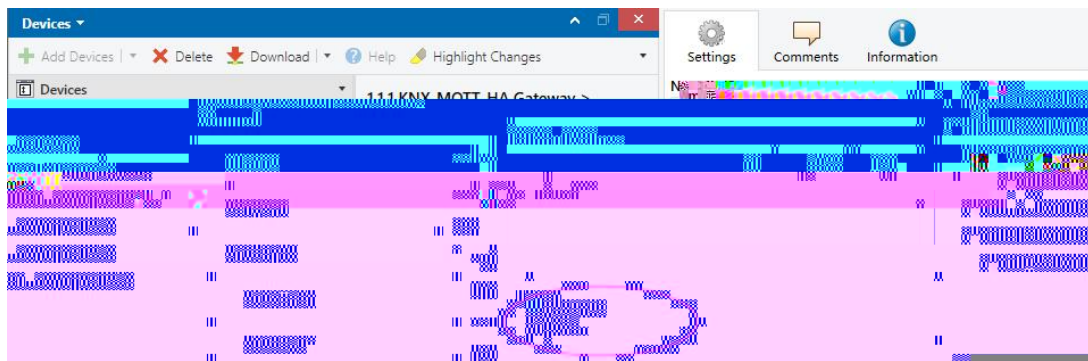
KNX Secure Commissioning Secure

Tunneling 5.7.3 Secure Tunneling ETS

5.7.4



5.7.3



5.7.4

Secure Commissioning

5.7.5

Secure Commissioning



Set Project Password
New project

To ensure secure communication, you must provide your project with a password so the stored keys in the project are protected. Select **Cancel** to use not security at the IP Backbone in this project.

A good password should consist of at least eight characters, at least one number, one uppercase letter, one lowercase letter, and have a special character.

New Password


Password strength

Confirm Password

OK

Cancel

5.7.5

5.8.KNX

KNX-MQTT-HA KNX KNX k

 (Tunneling) k

ETS



❖ KNX k

 , KNX

 k

❖ KNX k FDSK

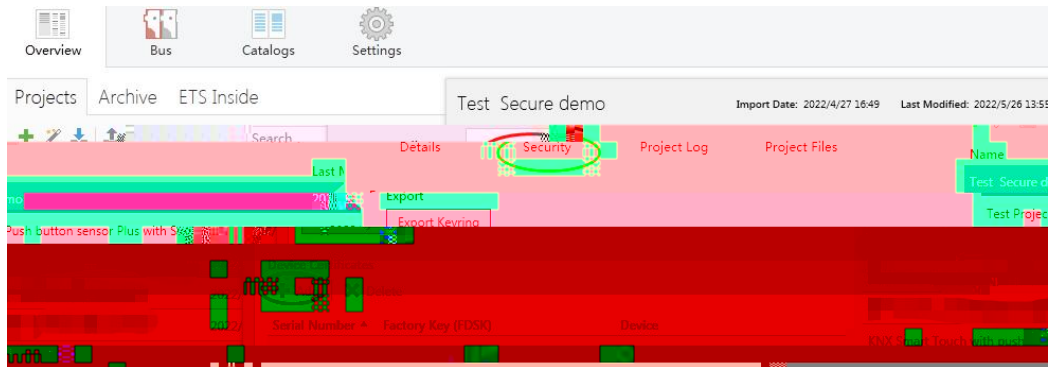
 ETS

❖ ETS

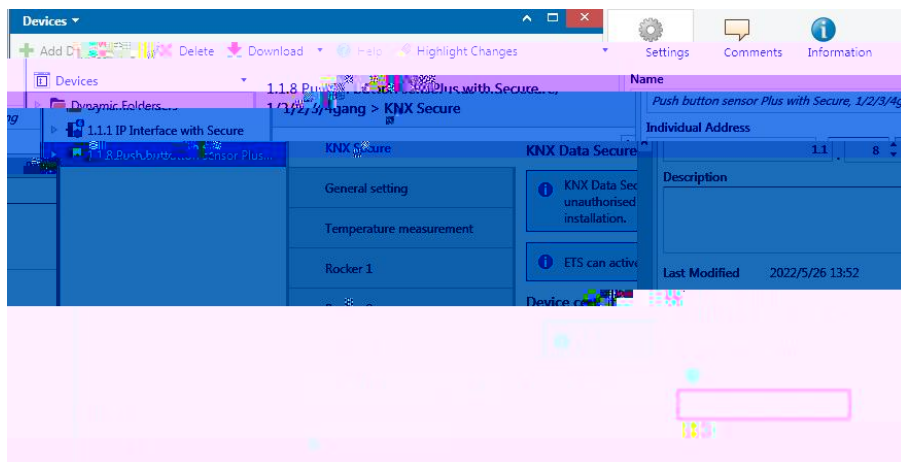
□ □ □ □

□ “Add Device Certificate” □

5.8.3 ^k



5.8.2 Add Device Certificate



5.8.3 Add Device Certificate

◇ □ □ □ □

FDSK ^k

FDSK □

□ □

KNX

□ ^k

FDSK

□ □ □

FDSK □ ETS

□ □ □

5.8.4 ^k

□ □ □

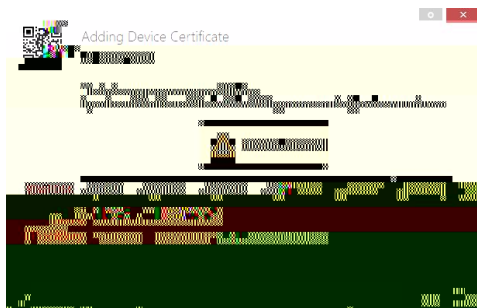
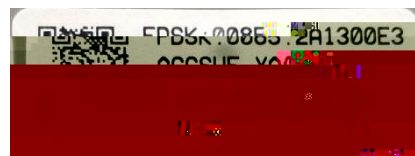
□ □ □

□ □ □

ETS □

□ □ □ □

FDSK ^k



5.8.4

□

□ □ □ □

□ □

□ k

□

□

□

□ 5.8.5

□

“Yes” □

“Add Device Certificate” □

□ □ □

□

FDSK □

□

□ □ □ □

□ □ □

□

□ □

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□

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□ □

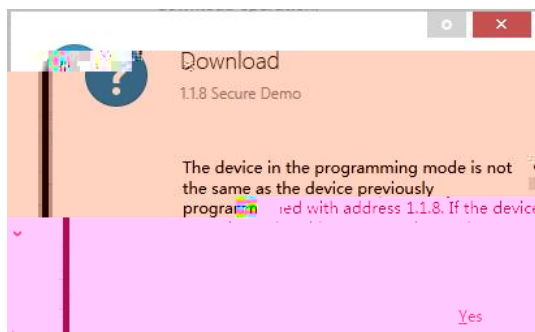
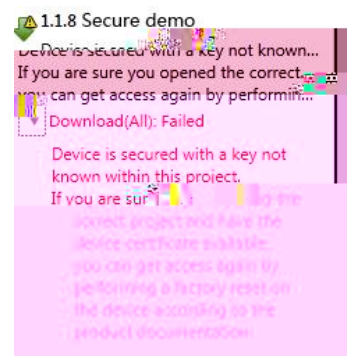
□

5.8.5

□

□

k



5.8.5

□

□ □ □

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□ □ □ □

□ □ □ □

□ FDSK k

□

□

□

“Add Device Certificate” □

□ □ □

□

□

□

k



5.8.6

ETS

□

□ □

□ □

□

□

□

□

□

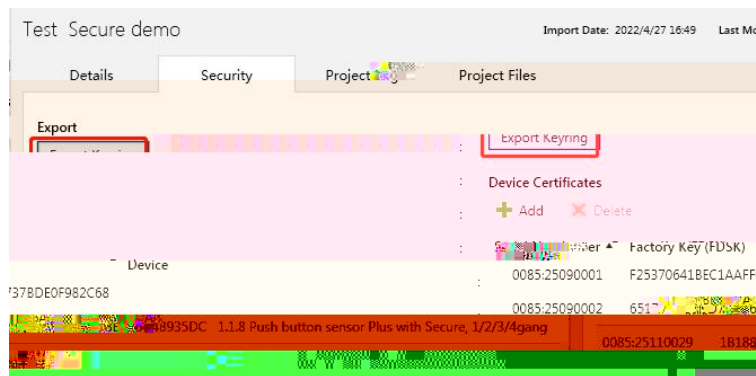
□

□ □ □ □

5.8.7 □

□

.knxkeys k



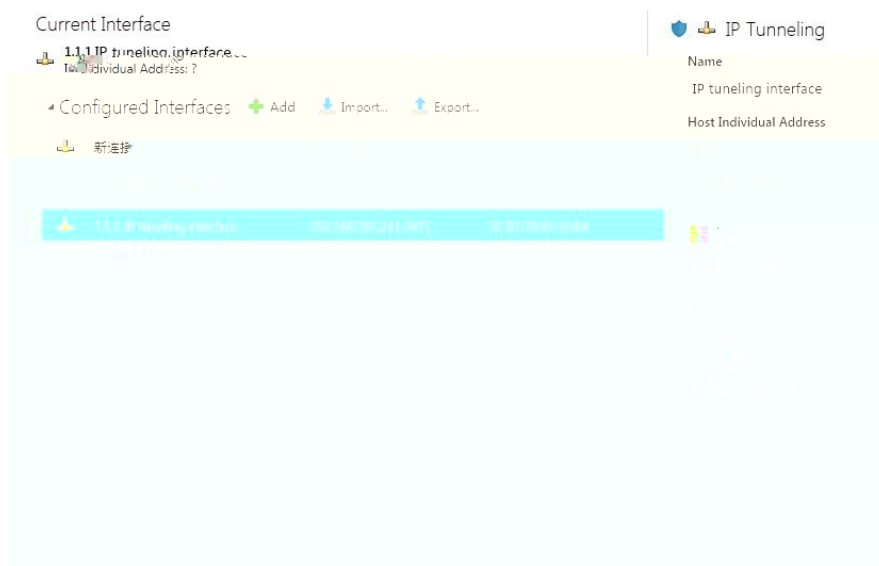
5.8.7

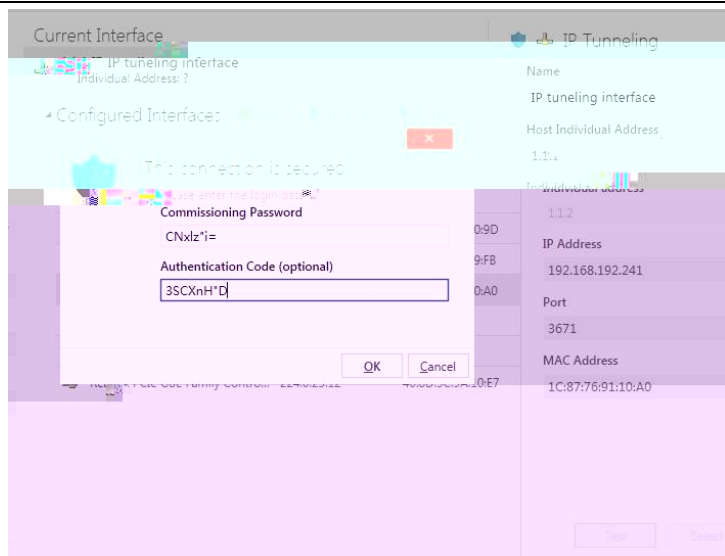
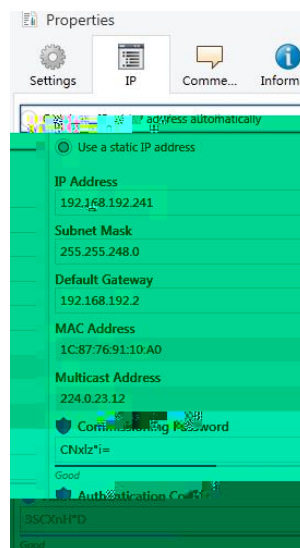
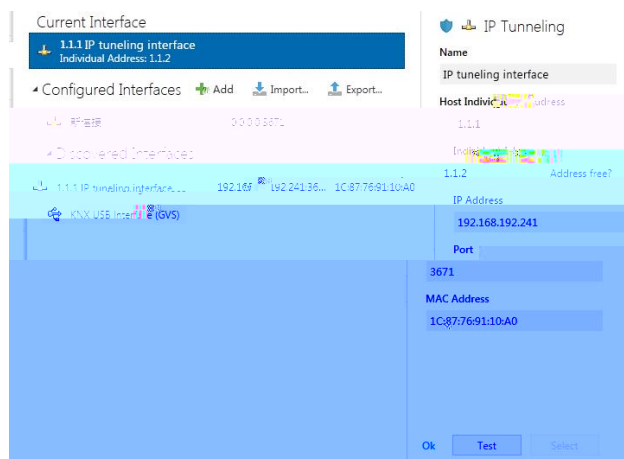
ETS IP

IP 1.1.2 Test

IP OK Test Ok

Select k 5.8.8 k



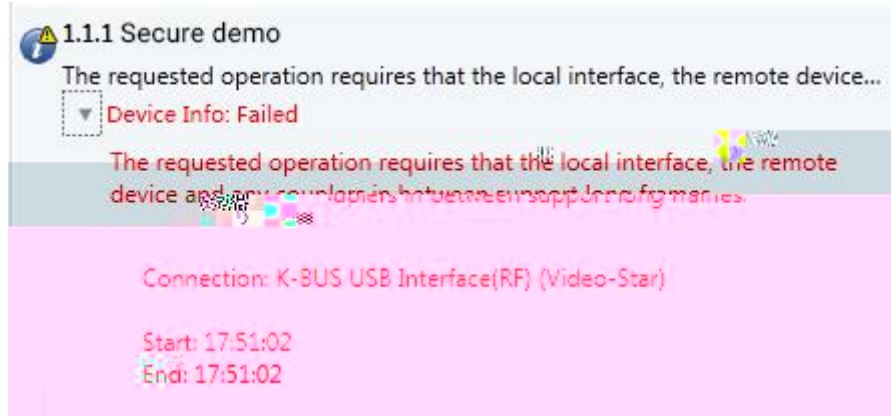


5.8.8 IP

5.8.8 ☐ ☐ Secure Tunneling ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

☐ Secure Tunneling ☐ ☐ ETS ☐ ☐ ☐ ☐ k

☐ ☐ KNX-MQTT-HA ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ k



5.8.9



KNX/EIB

KNX-MQTT-HA

5.9.

k

KNX

ETS

ETS

k

ETS

k

:

IP



KNX/EIB

KNX-MQTT-HA ☐

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
16	Value sender 1 - ...	Input/Output 1byte value			1 byte	C	R	W	T	U	counter pulses (0..255)	Low
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
16	Value sender 1 - ...	Input/Output 4bytes value			4 bytes	C	R	W	T	U	counter pulses (unsigned)	Low

Value sender

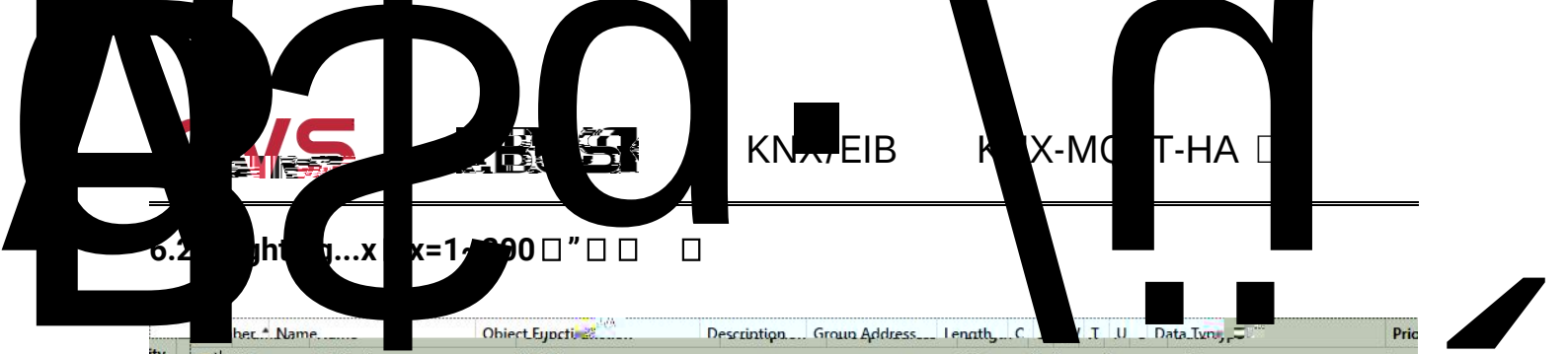
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
16	Select 1 - ...	Input/Output 1byte value			1 byte	C	R	W	T	U	counter pulses (0..255)	Low

Select

6.1 "Sensor...x" ☐ ☐ ☐

☐	☐ ☐	☐	☐		DPT
16	Input ...	Binary or sensor1 - {{}}	1bit 1byte 1byte 2byte 2byte 2byte 4byte 4byte 4byte	C,W,U	1.001 switch 5.010 counter pulses (0..255) 6.010 counter pulses (-128..127) 7.001 pulses 8.001 pulses difference 9.*2-byte float value 14.*4-byte float value 12.001 counter pulses(unsigned) 13.001 counter pulses(signed)
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ k ☐ ☐ ☐ Function name ☐ ☐ ☐ ☐ ☐ ☐ ☐ Binary or sensor1 - ☐ ☐ k					
16	Input/Out . ..	Value sender or select 1 - {{}}	1bit 1byte 2byte 4byte	C,W,T,U, R	1.001 switch 5.010 counter pulses (0..255) 7.001 pulses 12.001 counter pulses(unsigned)
☐ ☐ ☐ ☐ ☐ ☐ ☐ k					

☐ 6.1 "Sensor...x" ☐ ☐ ☐



6.2 Lighting...x=1.000" " " "

Object ID	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
116	Lighting 1 - ...	On/Off			1 bit						switch	Low
117	Lighting 1 - ...	On/Off status			1 bit						switch	Low
118	Lighting 1 - ...	Brightness value			1 byte						percentage (0..100%)	Low
119	Lighting 1 - ...	Brightness status			1 bit						percentage (0..100%)	Low
121	Lighting 1 - ...	Colour temperature status			2 bytes						absolute colour temperature	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
116	Lighting 1 - ...	On/Off			1 bit						switch	Low
117	Lighting 1 - ...	On/Off status			1 bit						switch	Low
118	Lighting 1 - ...	Brightness value			1 byte						percentage (0..100%)	Low
119	Lighting 1 - ...	Brightness status			1 bit						percentage (0..100%)	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
116	Lighting 1 - ...	On/Off			1 bit						switch	Low
117	Lighting 1 - ...	On/Off status			1 bit						switch	Low
118	Lighting 1 - ...	Brightness value			1 byte						percentage (0..100%)	Low
119	Lighting 1 - ...	Brightness status			1 bit						percentage (0..100%)	Low

	Object ID	Object Name	Object Type	Object Data	Object Value
116	On/Off	Lighting1 - {}	1bit	C,R,T	1.001 switch
117	On/Off,status	Fan1 - {} Valve1 - {} Lighting1 - {}	1bit	C,W,T,U	1.001 switch
118	Brightness value	Lighting1 - {}	1byte	C,R,T	5.001 percentage(0..100%)
119	Brightness,status	Lighting1 - {}	1byte	C,W,T,U	5.001 percentage(0..100%)



KNX/EIB

KNX-MQTT-HA

Obj.120 RGB k

Obj.121 RGB k

Obj.121 RGB k

3 RGB U8 U8 U8

3 _{MSB}	2	1 _{LSB}
R	G	B
UUUUUUUU	UUUUUUUU	UUUUUUUU

R: G: B: k

KNX/

6.4. "AC...x" x=1~16

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1516	AC1 - ...	On/Off			1 bit	C	R	-	T	-	switch	Low
1517	AC1 - ...	Current temperature			2 bytes	C	R	-	T	-	temperature (°C)	Low
1518	AC1 - ...	Room temperature			2 bytes	C	-	W	T	U	temperature (°C)	Low
1520	AC1 - ...	Control mode			1 byte	C	R	-	T	-	AC control mode	Low
1521	AC1 - ...	Fan speed			1 byte	C	R	-	T	-	percentage (0..100%)	Low
1522	AC1 - ...	Fan speed, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
1523	AC1 - ...	Control mode, status			1 byte	C	-	W	T	U	HVAL control mode	Low
1525	AC1 - ...	Fan speed, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
1526	AC1 - ...	On/Off, status			1 bit	C	R	-	T	-	switch	Low

6.4 "AC...x" x=1~16

					DPT
1516	On/Off	AC1 - {}	1bit	C,R,T	1.001 switch
1526	On/Off,status	AC1 - {}	1bit	C,W,T,U	1.001 switch
<p>Obj.1516: 0 / 1 k</p> <p>Obj.1526: 0 / 1 k</p> <p>Function name: AC1 - {} k</p>					
1517	Current temperature setpoint	AC1 - {}	2bytes	C,R,T	9.001 temperature
1522	Current temperature, status setpoint	AC1 - {}	2bytes	C,W,T,U	9.001 temperature
<p>Obj.1517: 0 k</p> <p>Obj.1522: 0 k</p>					
1518	Room temperature	AC1 - {}	2bytes	C,W,T,U	9.001 temperature
<p>0 k</p>					
1519	Swing position	AC1 - {}	1byte	C,R,T	5.001 percentage

KNX/EIB

KNX-MQTT-HA



KNX/EIB

KNX-MQTT-HA

□ □ □ □

KNX-MQTT-HA □ □ □ □ □

	15.15.254
IP □ □ □ IP tunneling □ □	15.15.241
	15.15.242
	15.15.243
	15.15.244
	15.15.245
IP □ □	
IP	192.168.2.200
□	255.255.255.0
□ □ □	192.168.2.1

□ □ □ □ IP □ □ □ □ □ □ □ k

□ □ □ □ □ □ □

□ □ □ □ 4 □ □ □ 4 □ □ 3 □ □ LAN ! KNX □ □ □

LAN ! KNX □ □ □ □ □ □ □ k

FDSK □ □ □ □ □ □ □ 5.8 □ KNX k