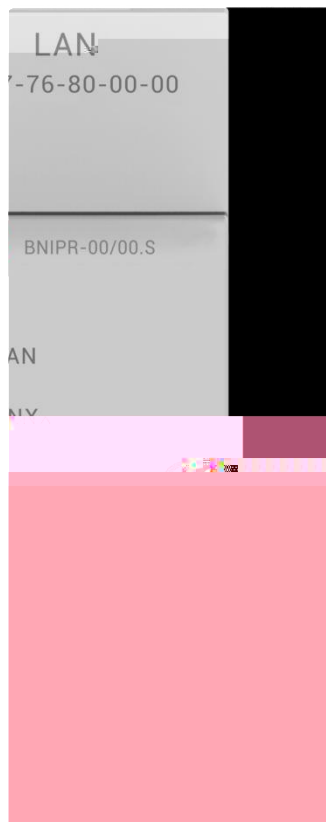


K-BUS KNX IP

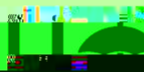
IP Router with Secure_V1.3

BNIPR-00/00.S



KNX/EIB

设计管理



		1
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KNX IP

KNX / IP

TP KNX

KNX IP

KNX-TP

KNX IP

KNX-TP

KNX IP

KNX TP

TP

TP

KNX (KNX /IP S)

KNX IP

KNX IP

ETS

KNX

KNX IP

5

IP

IP

KNX IP

KNX

ETS (ETS5

KNX IP

EN 60 715

35

KNX IP

KNX	/ IP	KNX	KNX	/ IP

KNX / IP IP

KNX

IP

KNX / IP

KNX / IP

KNX IP

KNX IP

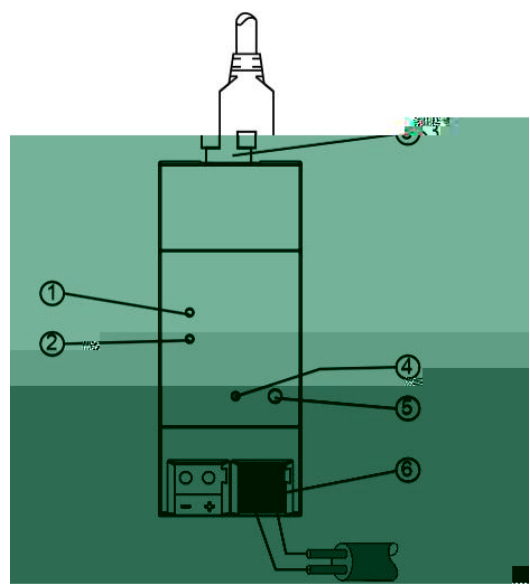
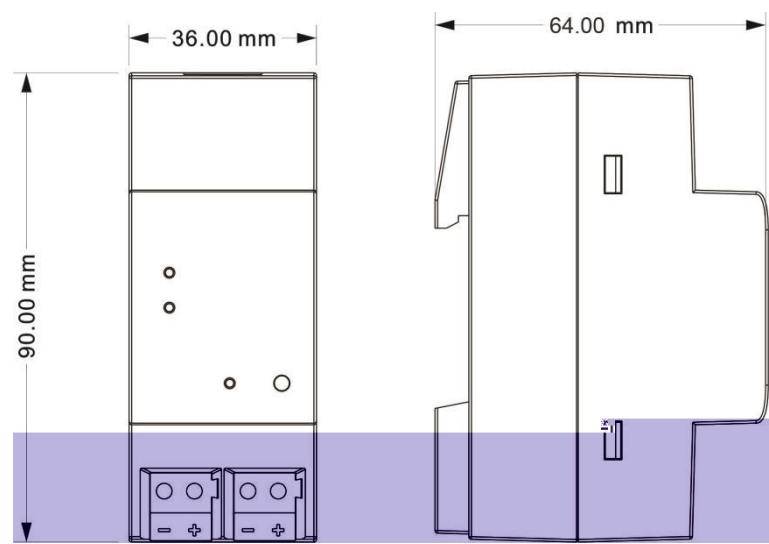
TP

IP

KNX

KNX

21-30V DC, KNX			
<19.5 A 24V <15.5 A 30V			
<470 W			
KNX	/		0.8
LAN	RJ45	10/100 Ba	-T
LED			
LED LAN			
LED LAN			
LED KNX	KNX		
LED KNX			
5 C ... + 45 C			
25 C ... + 55 C			
25 C ... + 70 C			
<93%			
90	36	64	
0.1KG			
35			



1	LAN LED	:	4	LED	
2	KNX LED	:	5		4 4
		:			3 6
3	LAN	KNX	6	KNX	/

IP

KNX

KNX /IP KNX IP KNX IP IP KNX
IP 224.0.23.12 3671 IP 224.0.23.12

KNX IANA KNX /IP

- KNX IP IP IP
- IGMP () IP
- IP IP ETS
- Tunneling IP TP IP
- IP
- Tunneling IP
- KNX/USB KNX/IP KNX IP

KNX

IP

KNX IP KNX KNX

KNX

IP

KNX

KNX

IP

X.0.0,

1 X 15

ETS

15

KNX

IP

KNX

IP

IP

IP

1.0.0 IP

IP

1.X.0, 1 X 15

1.1.0 IP

IP

1.0.0

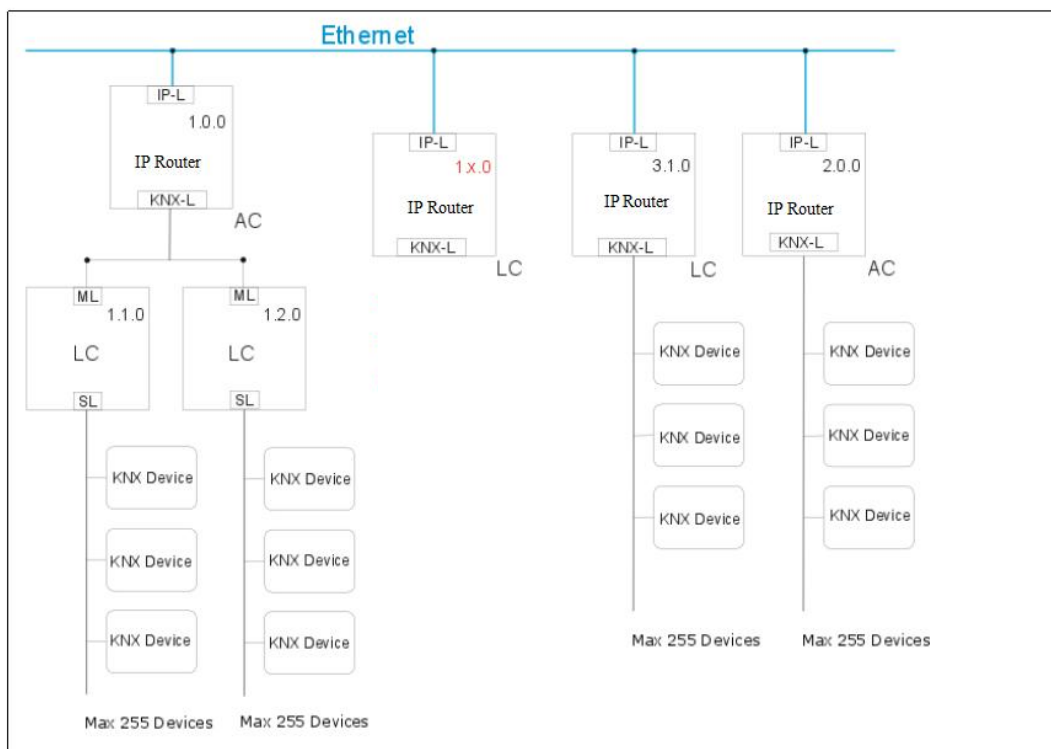
IP

IP

IP

IP

2 IP



KNX IP

KNX IP

X.Y.0 1 X&Y 15 ETS 225 1.1.0 15.15.0

3 ETS R ... a

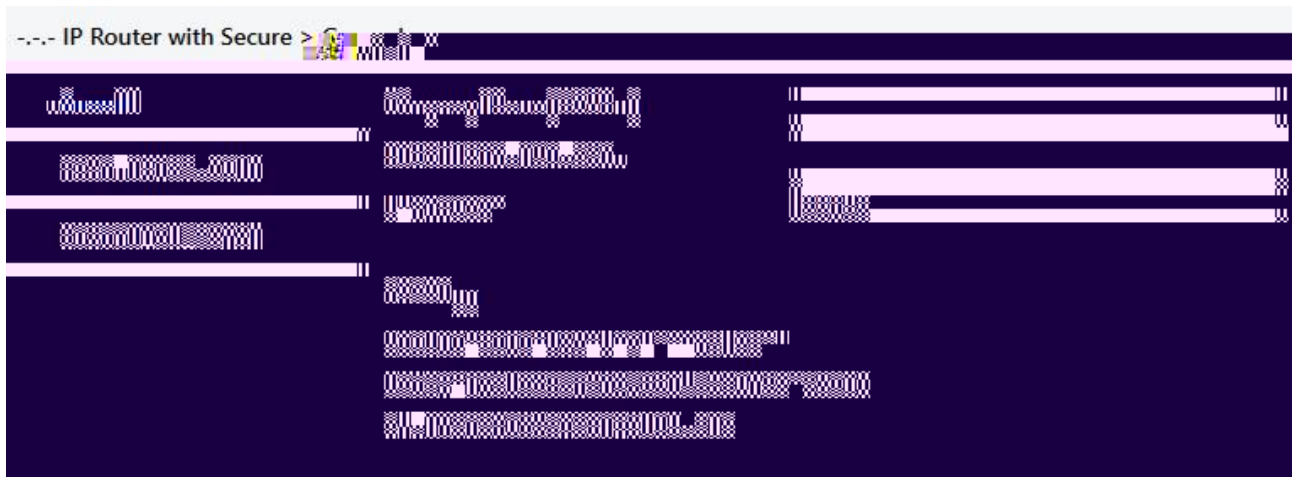
ETS

“General”

G a

5.1

DNS



5.1 "G a

"Company Name (30 char.)"

30

"Project Name (30 char.)"

30

"DNS server"

DNS

IP settings

Configuration in ETS windows-->Properties

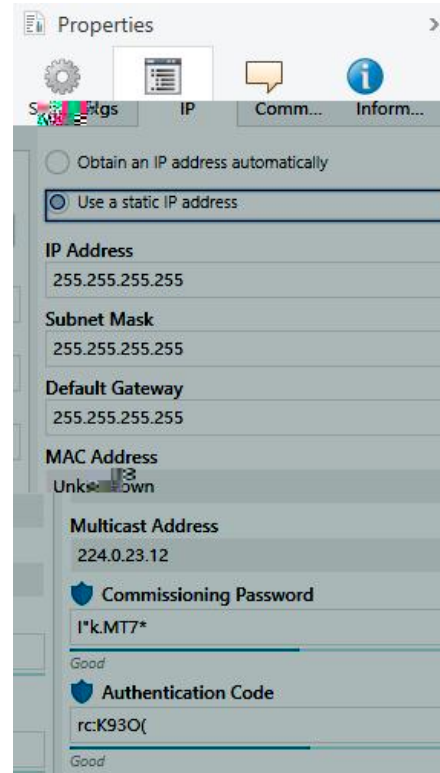
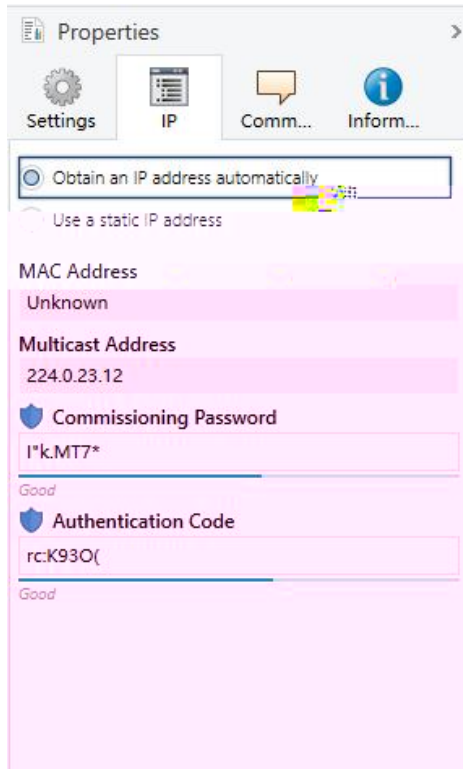
ETS

IP

IP

Device name: Device-->Properties-->Settings-->Name

ETS



Obtain an IP address automatically

IP

KNX

IP

DHCP

IP

IP

DHCP

Use a static IP address

IP

DHCP

IP

IP

IP

MAC

(Multicast Address) 224.0.23.12

(Commissioning Password)

(Authentication Code)

KNX

(S

C

)

IP

(IP

)

Routing (KNX->LAN)"

--- IP Router with Routing (KNX -> LAN)

General

Routing (KNX -> LAN)

Routing (LAN -> KNX)

Group telegrams (main groups 0...13)

Group telegrams (main groups 14...31)

Physical telegrams

Broadcast telegrams

Acknowledgements

Filter

Filter

Filter

☐ Block ☒ Route

5.2 R (KNX->LAN)

"Group telegrams (main groups 0...13)"

0 13

Block

Route

Filter

B : (0...13)

R : (0...13)

F : (0...13)

"Group telegrams (main groups 14 ...31)"

11 1

"Physical telegrams"

Block

Route

Filter

B :

R :

F :

: "Route"

"Broadcast telegrams"

Block

Route

B : KNX IP

R :

"Acknowledge(ACK) of group telegrams"

KNX IP

Only if routed

Always

O : KNX LAN ACK

A a : KNX

"Group telegrams (main groups 14 ... 31)"

14 31

Block

Route

Filter

B : (14...31)

R : (14...31)

F : (14...31)

"Physical telegrams"

Block

Route

Filter

B :

R :

F :

: "Route"

"Broadcast telegrams"

Block

Route

B : KNX IP

R :

"Repetition of group telegrams"

Disable

Enable

KNX TP

D a :

E a :

"Repetition of physical telegrams"

Disable

Enable

KNX TP

D a :

E a :

"Repetition of broadcast telegrams"

Disable

Enable

KNX TP

D a :

E a :

(tunneling)

KNX KNX IP 5 5.4.1

ETS V a a APP (S a) (Ta) (B)



5.4.1

ETS5

5

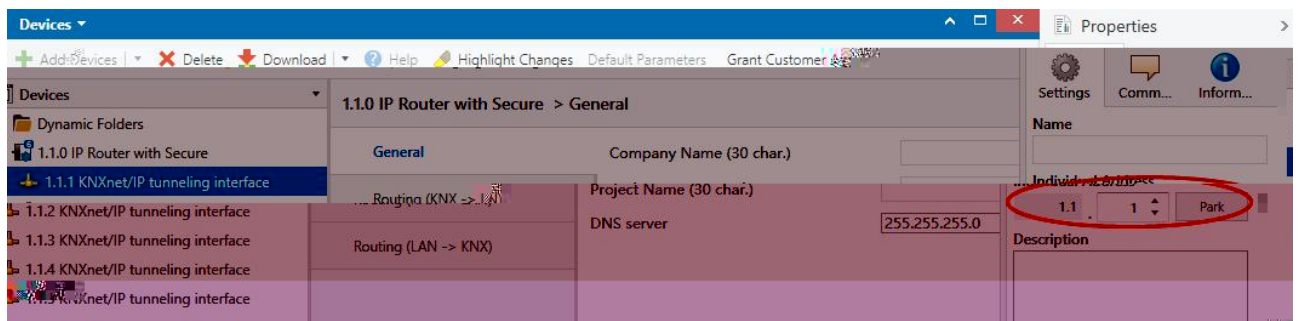
Pa 5.4.2

15.15.255

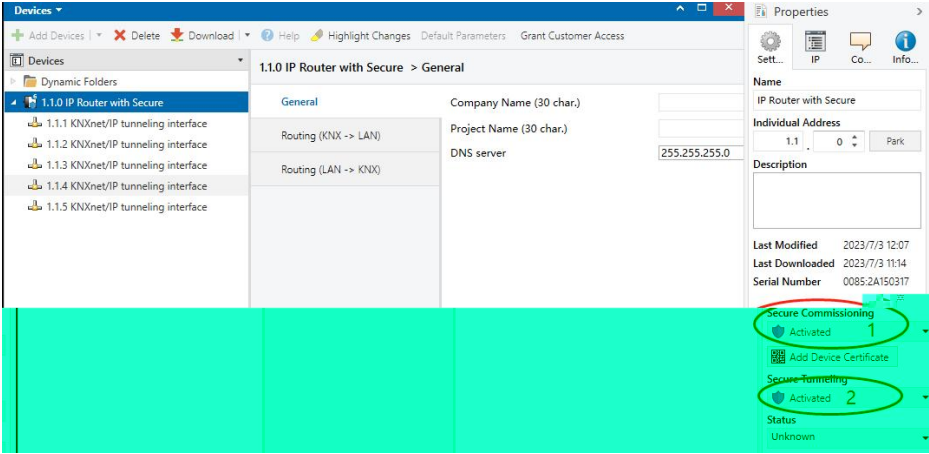
Pa

15.15.255

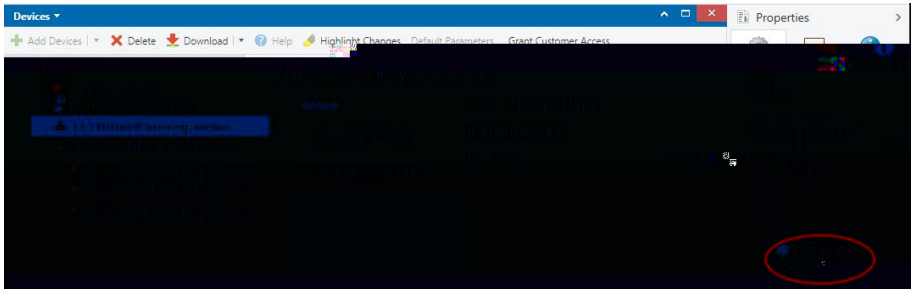
15.15.255



5.4.2



5.4.3



5.4.4

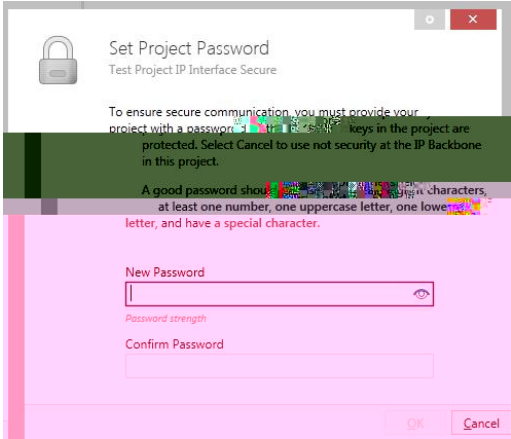
S

C

5.4.5

S

C



5.4.5

KNX

KNXIPKNXKNX

(T)

❖KNX

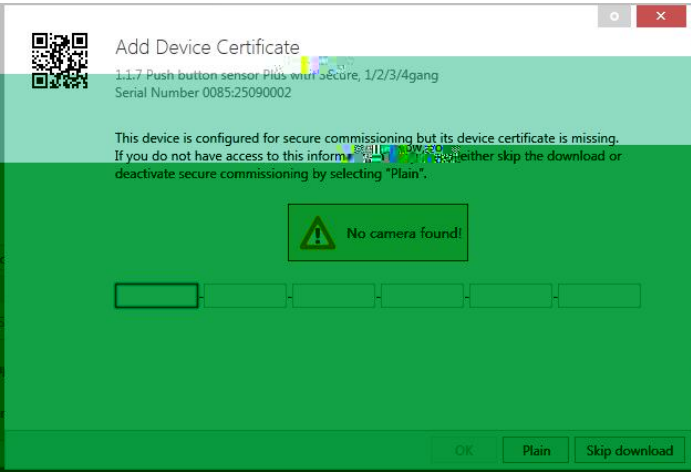
--KNX

❖KNXFDSK =

ETS

✧ETSS5.5.1

QR

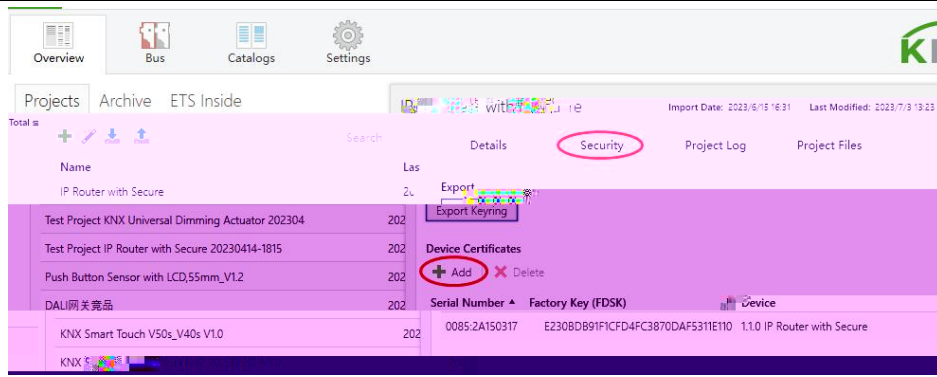


5.5.1 A D C a

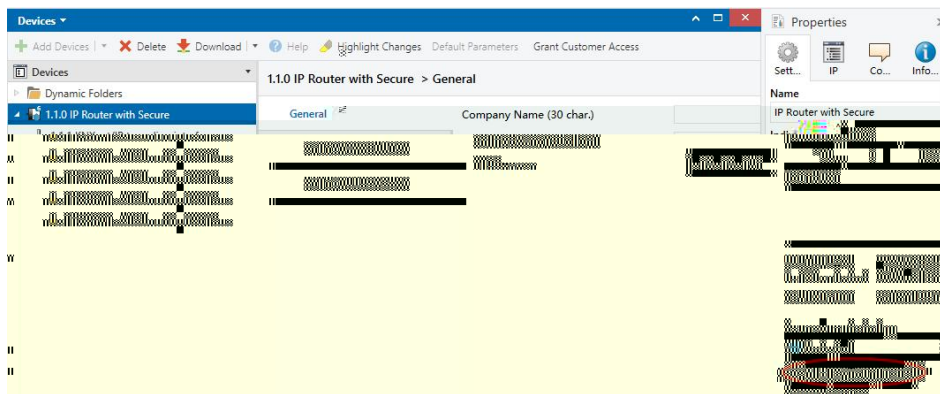
✧ETS

S5.5.2

A D C a5.5.3



5.5.2 A D C a



5.5.3 A D C a



FDSK

FDSK

KNX

FDSK

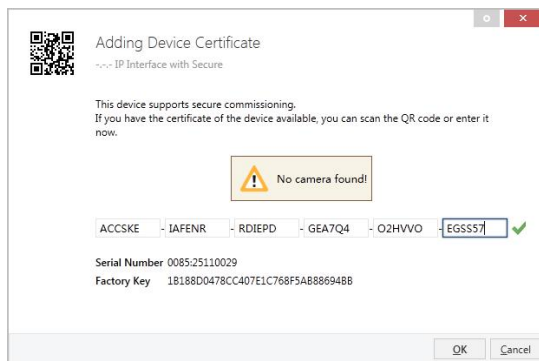
FDSK

ETS

5.5.4

ETS

FDSK



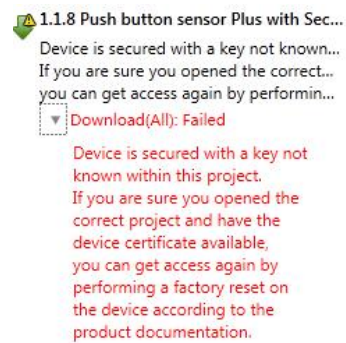
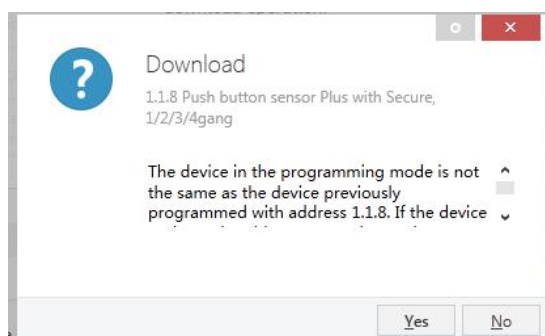
5.5.4

5.5.5

A D C a

FDSK

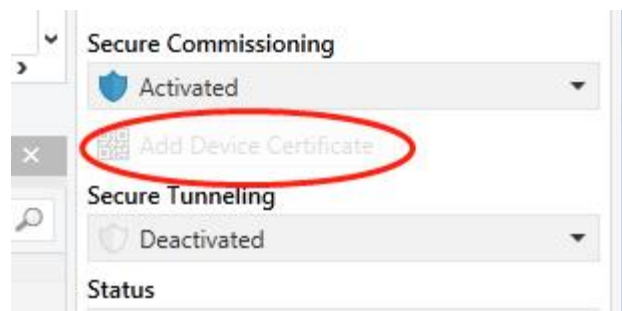
5.5.5



5.5.5

FDSK

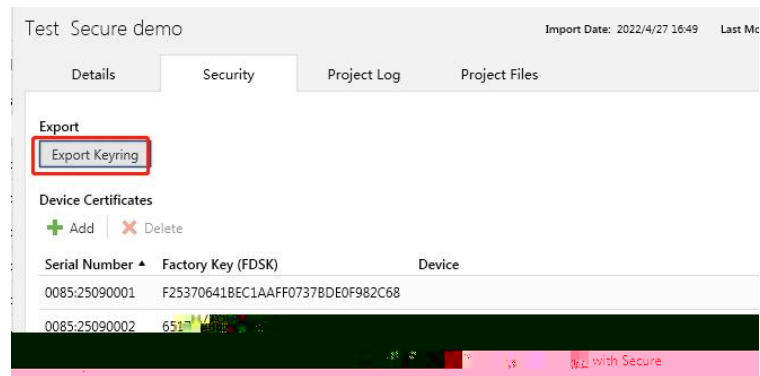
A D C a



5.5.6

ETS

5.5.7



5.5.7

ETS

IP

KNX

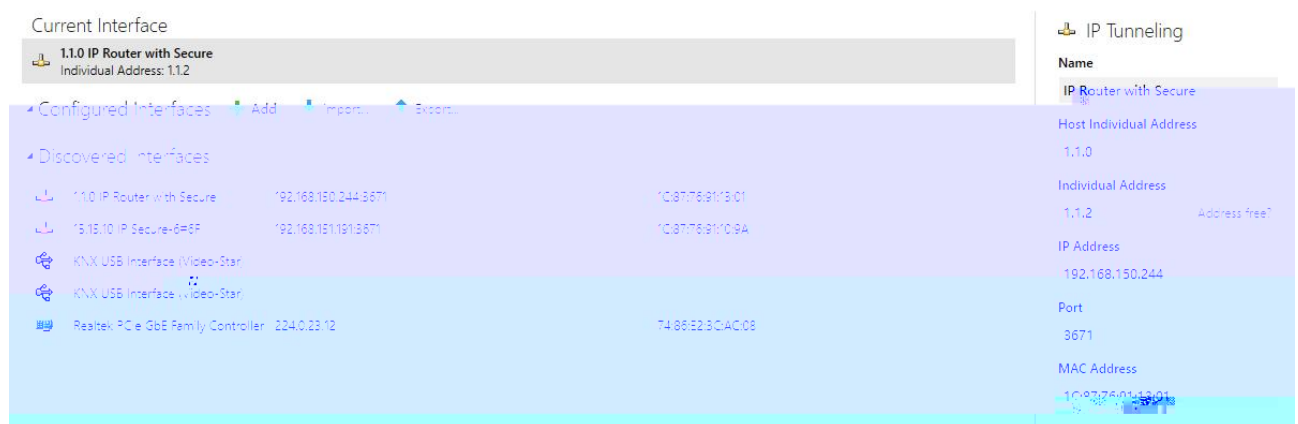
KNX

IP

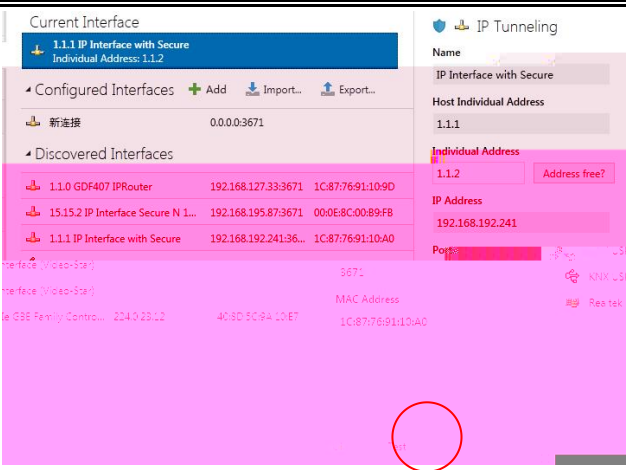
ETS

IP

5.6.1



5.6.1 ETS



5.6.2 IP

5.6.2

S T

S T

ETS

KNX IP

6

KNX

USB

“ ”,

ETS

KNX IP

			15.15.0
IP	IP tunneling		15.15.241
			15.15.242
			15.15.243
			15.15.244
			15.15.245
IP			
IP address assignment		F	192.168.2.200
IP routing multicast address			224.0.23.12
Routing (KNX->LAN)			
Group telegrams (main group 0...13)		F	(F a)
Group telegrams (main group 14...31)			F
Physical telegrams			F
Broadcast telegrams			R
Acknowledge(ACK) of group telegrams			O
Acknowledge(ACK) of physical telegrams			O
Routing (LAN->KNX)			
Group telegrams (main group 0...13)		F	(F a)
Group telegrams (main group 14...31)			F
Physical telegrams			F
Broadcast telegrams			R
Repetition if group telegrams			E a
Repetition if physical telegrams			E a
Repetition if broadcast telegrams			E a

KNX IP

: IP