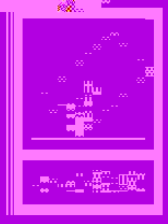


注意事项

1、请远离强磁场、高温、潮湿等环境；



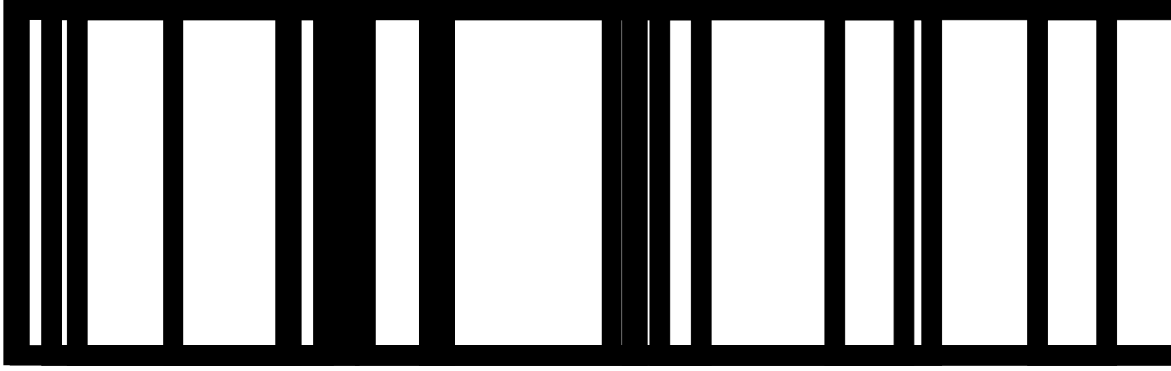
落在地上或使之受到强力冲



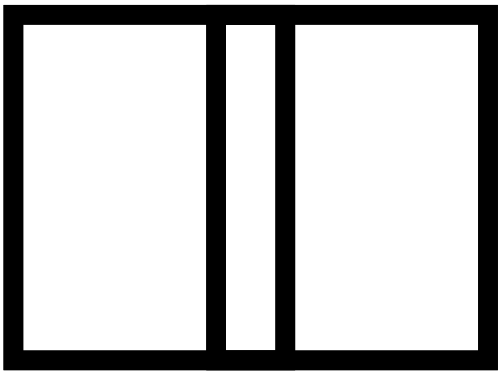
3、不要用湿手触摸正在充电的设备；



4、请勿自行拆卸本设备。



–





□□

□

□

□ □

□ □

□ □

KNX KNX

k

! ! PM2.5 ! PM10 ! CO2 ! TVOC !

! k

! ! /

k

k

CO2 ! ! ! ! !

k

k

KNX 12-30V DC k

.knxprod ETS

ETS5.7 k

- ! ! PM2.5 ! PM10 ! CO2 ! TVOC ! ! !

  AQI

- !

  ! PM2.5 ! PM10 ! TVOC ! !

AQI

- AQI ¦ CO2 ¦ ¦ PM2.5 ¦ PM10 ¦ TVOC ¦
- k 4
-
-
- HVAC 2 PI
  2 4
- / /CO2 3 / /CO2
-
- KNX

! ! ! ! ! !

! !

CSMS-04/00.1.00	Temp./RH/PM2.5/PM10
CSMS-05/00.1.00	Temp./RH/CO2/PM2.5/PM10
CSMS-06/00.1.00	Temp./RH/CO2/PM2.5/PM10/TVOC
CSMS-09/00.1.00	Temp./RH/CO2/PM2.5/PM10/TVOC/Formaldehyde/Brightness/Motion

21-30V DC, KNX

<4mA/24V <4mA/30V

<100mW

12-30V DC

<16mA/24V DC <12mA/30V DC

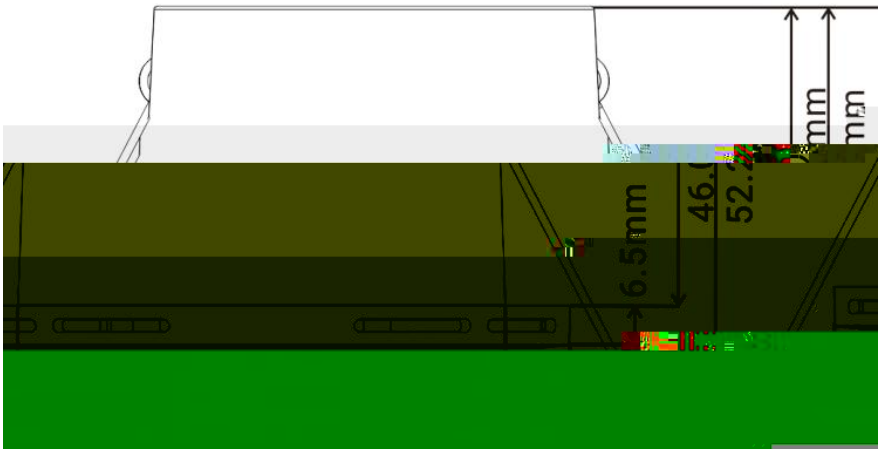
<0.5W

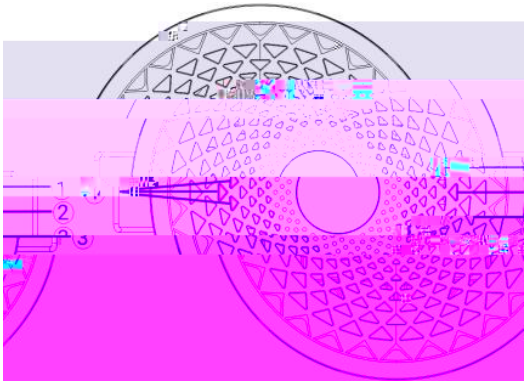
KNX / 0.8 mm

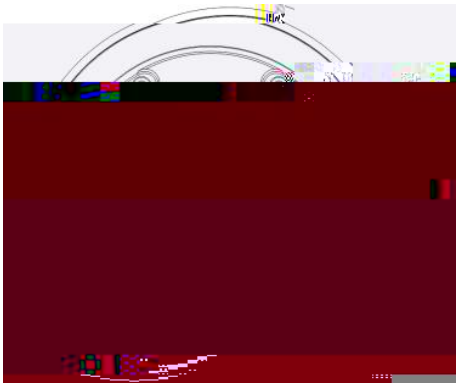
/

LED

–10°C~ +

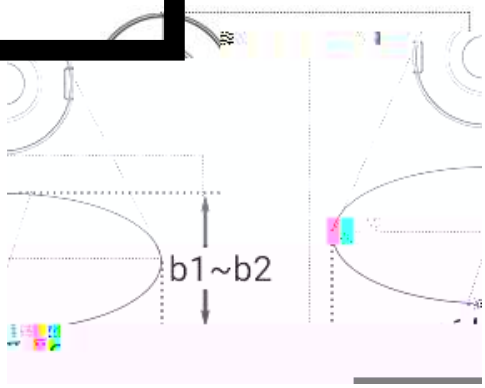


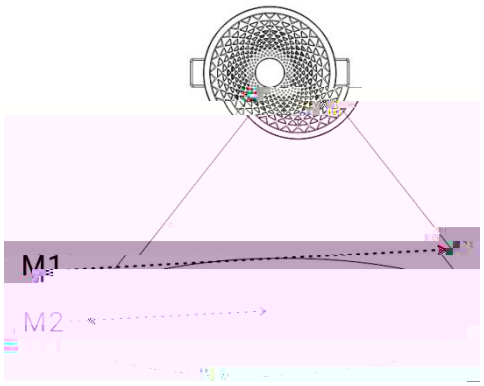




LED

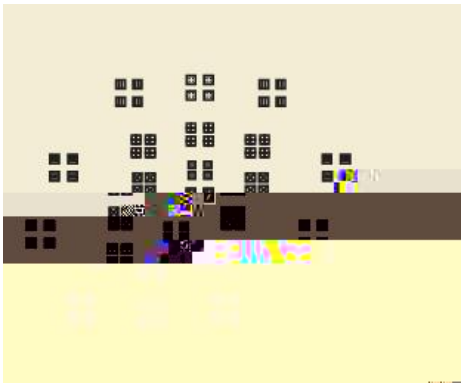
KNX ३





3.3.2(1)

1m/s (H) ("



3.3.2(2)

k

k

k

! ! ! k

k

! k

! ! PM2.5 ! PM10 ! CO2 ! TVOC ! k

k k

k

k

k

4 k

2 ! k

/ k

3 (A/B/C D/E/F) 3 k / k

2

k

k

/ k

! +

1~3 k

/ k

k k

! +

1~3 k

/ k

3 !

! k / k

2 / / k 4 k /

/

k

= Ô

® k

® 0%

0 k - -

KNX/EIB

k

❖ KNX k FDSK =

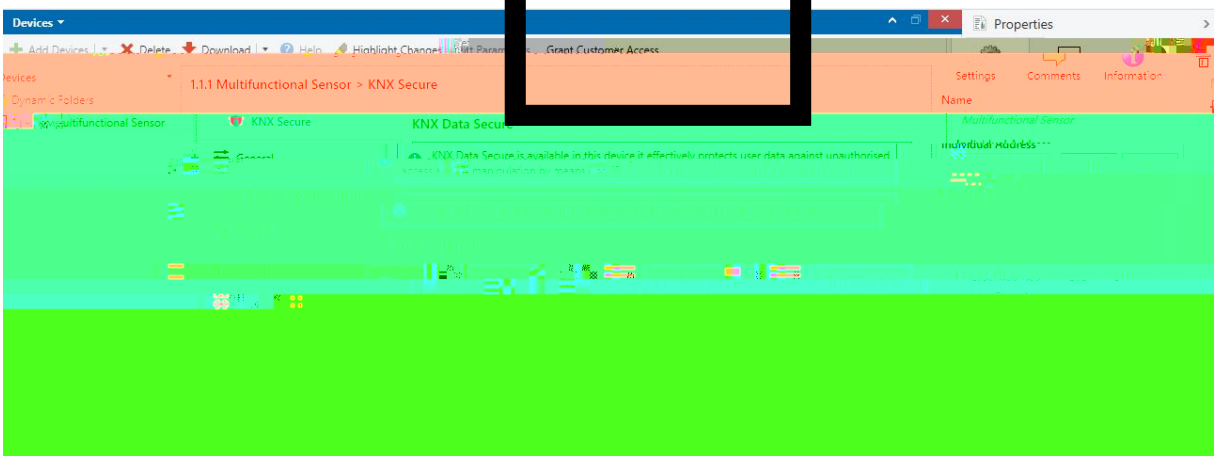
ETS

✧ ETS 5.1 (2) k

□ □ □ QR k



5.1(2) Add Device Certificate



5.1(4) Add Device Certificate

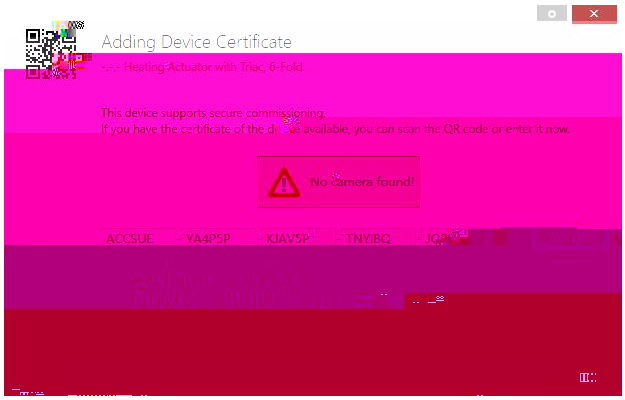
✧ FDSK k

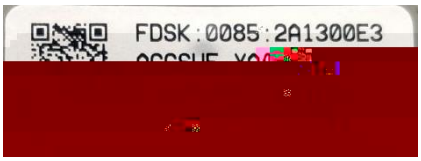
k

FDSK FDSK ETS 5.1(5) k

ETS

FDSK k



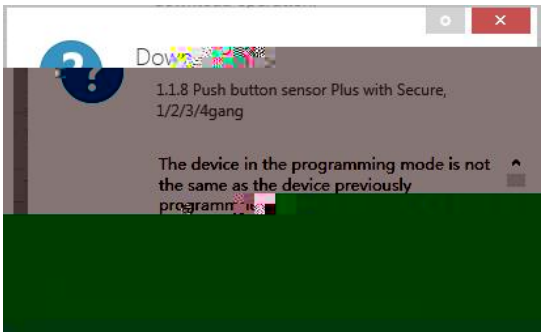


5.1(5)

k

5.1(6) “Yes” “Add Device C

5.1(6) k


1.1.8 Push button sensor Plus with Secure,
1/2/3/4gang
The device in the programming mode is not
the same as the device previously


1.1.8 Push button sensor Plus with Sec...
Device is secured with a key not known...
Download(All): Failed
Device is secured with a key not
known within this project.
If you are sure you opened the
correct project and
device certificate available,
you can get access ag
by
performing a factory reset on
the device according to the
product documentation.

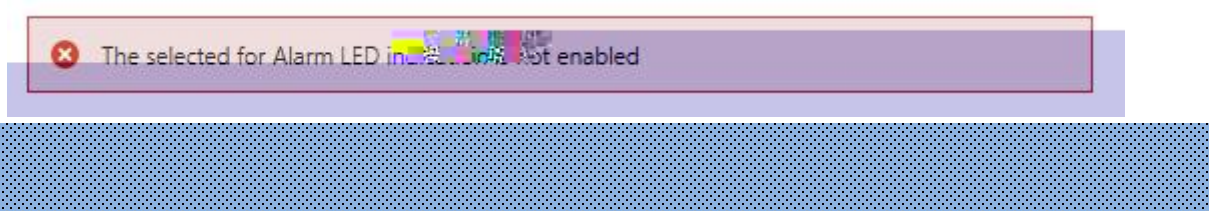
5.1(6)

□ □ □

k

k

k



k k

k k

k k

k k

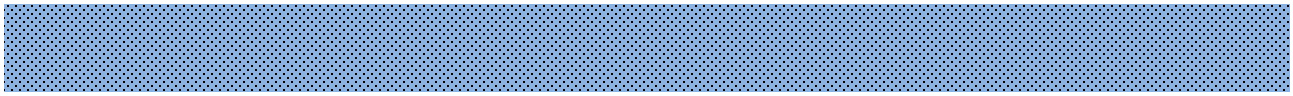
k k

PM2.5 k PM10 PM10 k

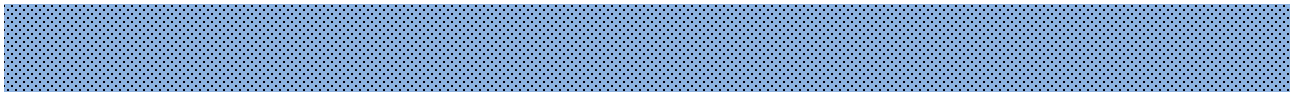
PM10 k PM10 PM10 k

Air Quality Level function	✓
Air Quality controller	✓
Room temperature controller	✓
Ventilation controller	✓
Logic function	✓
Scene group function	✓

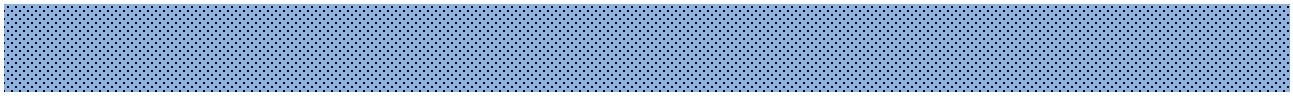
5.2.2 “Advanced function”



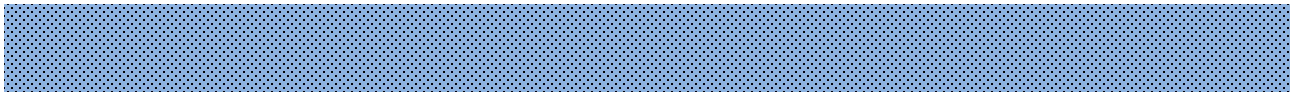
k 5.4 k



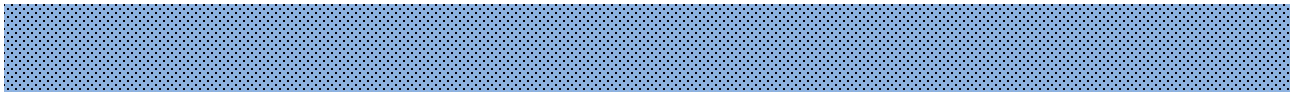
k 5.5 k



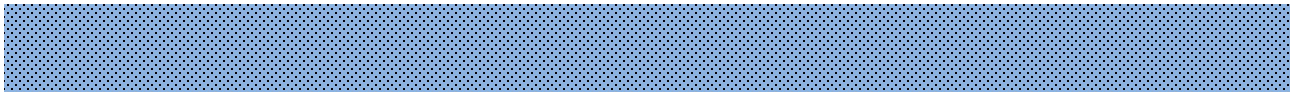
k 5.9 k



k 5.10 k



k 5.11 k

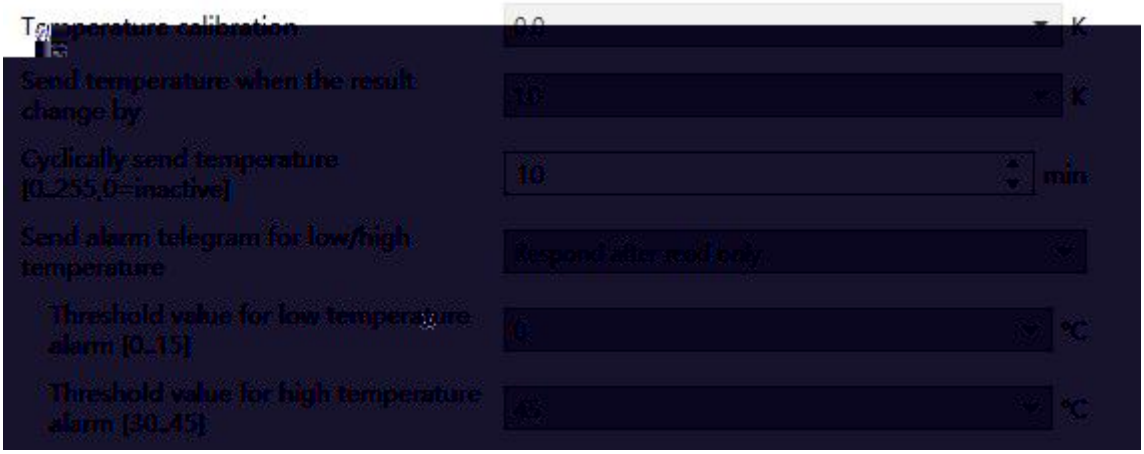


k 5.12 k

! ! ! ! ! !

k !

k



5.3.1 “Temperature sensor”

k

k

k Disable k

k 0 k

k

/ k

No respond .

Respond after read only

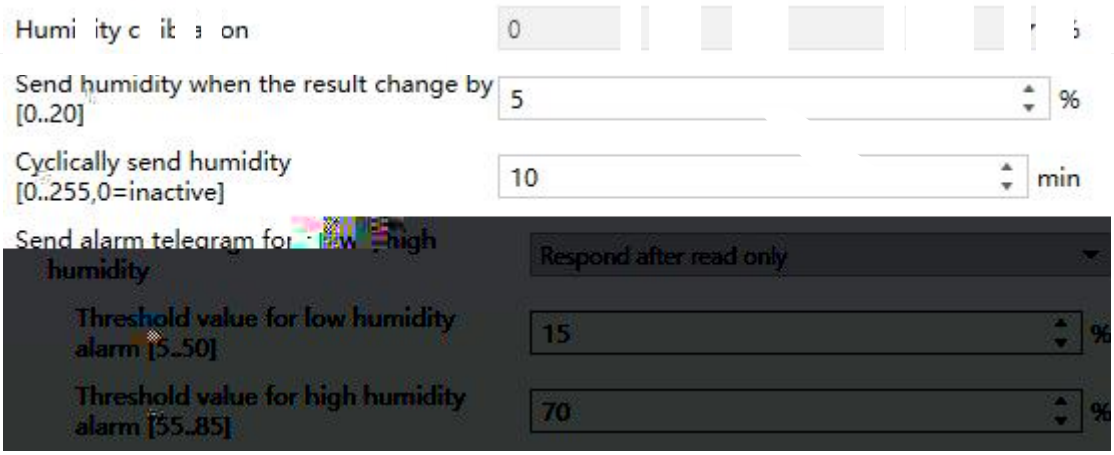
“ Low temperature alarm”/“ High temperature alarm” k

Respond after change “ Low temperature alarm”/“ High temperature alarm” k

“Respond after read only” “Respond after change) ȳ

k k

k k



5.3.2 “Relative humidity sensor”

k

No respond k

Respond after read only

“ Low humidity alarm”/“ High humidity alarm” k

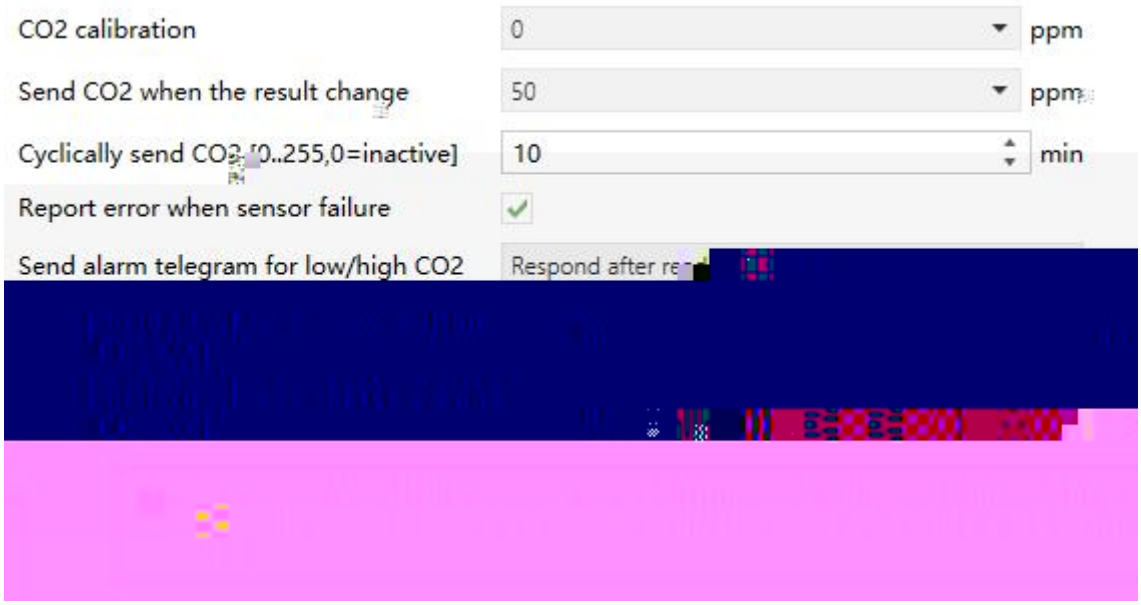
Respond after change “ Low humidity alarm”/“ High humidity alarm”

k

“Respond after read only” “Respond after change” k

k k

k k



5.3.3 “CO2 sensor”

CO2 CO2

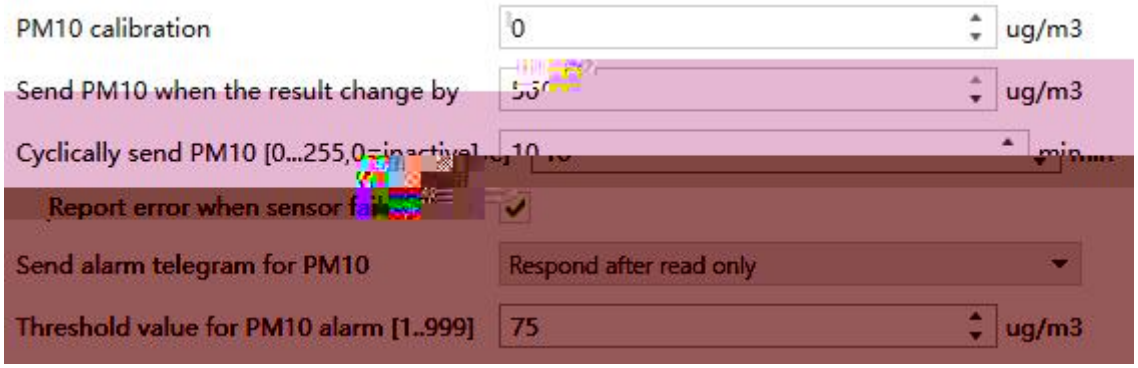
CO2 k

k

k

CO2 CO2 k Disable k

CO2 k



5.3.5 “PM10 sensor”

PM10 PM10

PM10 k

PM10 PM10 k 0 k

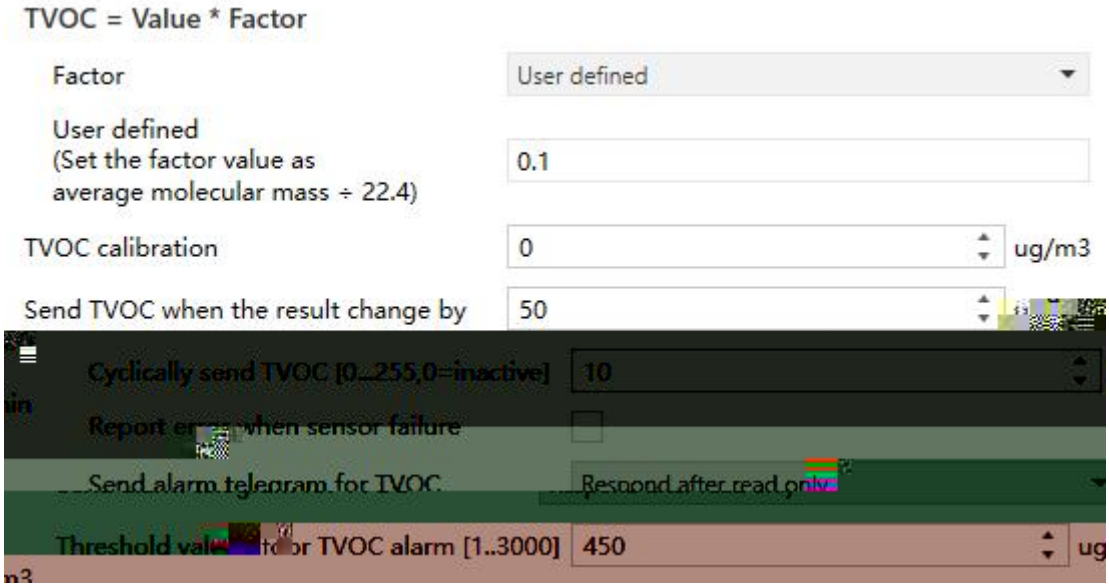
PM10 k 0 k

k

k □ k

PM10 k

KNX/EI



5.3.6 “TVOC sensor”

k

k

k

ppb TVOC µg/m°

“Object datatype of TVOC” “Float value in ug/m3(DPT_9.030)”

TVOC k

k k

TVOC k

No respond k

Respond after read only

“ TVOC alarm” k

Respond after change “ TVOC alarm”

k

“Respond after read only” “Respond after change” k

TVOC k TVOC TVOC k

k k

k

No respond k

Respond after read only

“ Formaldehyde alarm” k

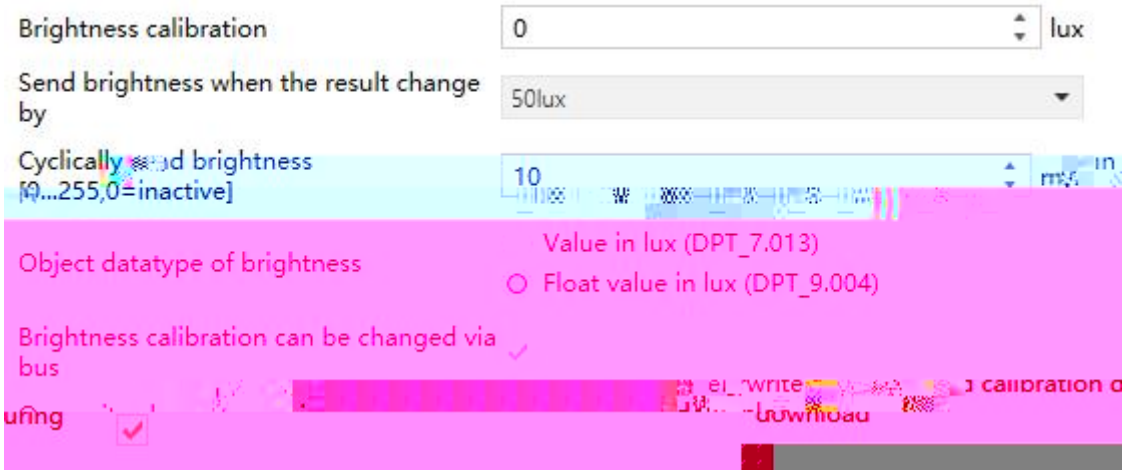
Respond after change “ Formaldehyde alarm”

k

“Respond after read only” “Respond after change” k

k k

[



5.3.8 “Brightness sensor”

k

k Disable k

k 0 k

k

AQ CO PM2.5 ! PM10 ! TVOC k

5.4.1 5.4.7 k

AQI AQI k Disable k

AQI 0 k

k

AQI k

No respond k

Respond after read only

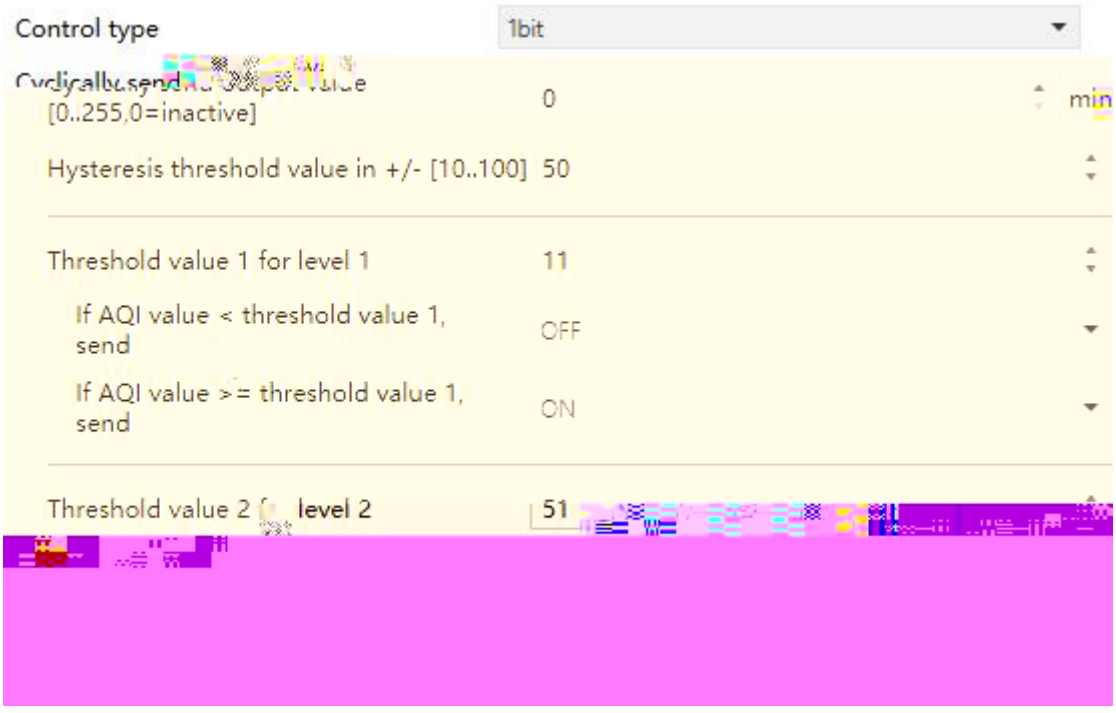
alarm” k

Respond after change □ □ □ □ □ □ □ □ □

“Respond after read only” “Respond after change” k

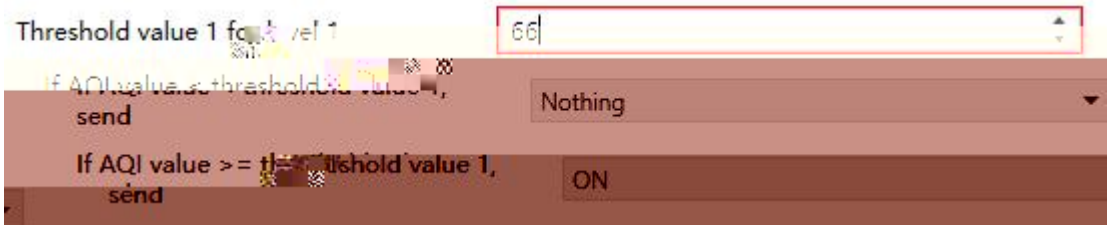
AQI k AQI AQI k

AQI 5.4.1.1 k



5.4.1.1 “Output”

x x AQI 6 1bit 6 k



AQI x k

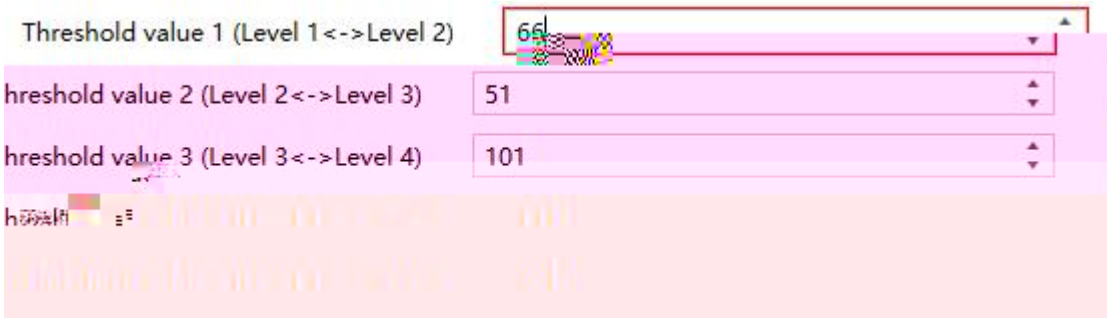
AQI x k

1 AQI 1 2 1

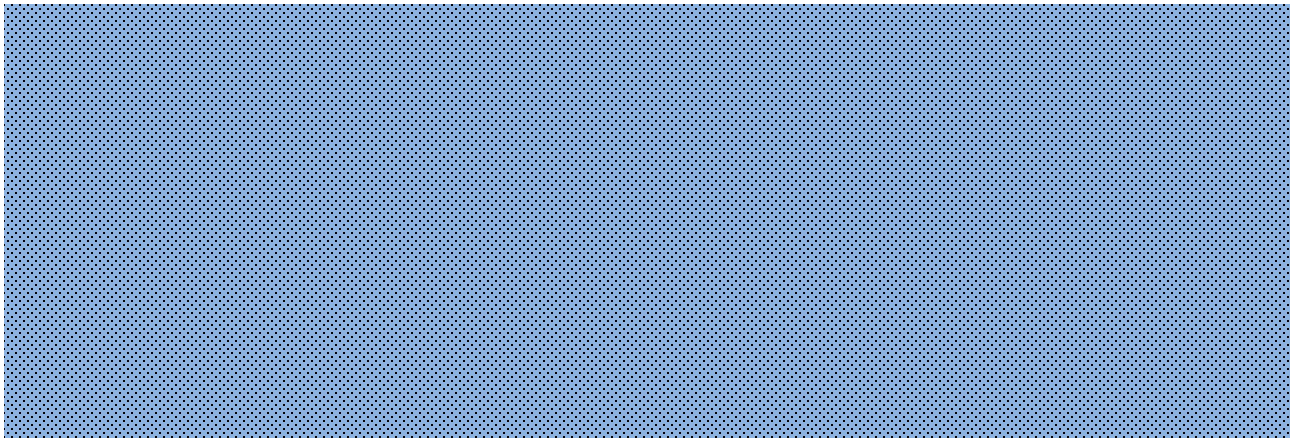
1 k

2	AQI	2	3 k
3	AQI	3	4 k
4	AQI	4	5 k
5	AQI	5	6 k

k



1~5



AQI k

- -

“Send value" k d AQI P(k

- -



5.4.2 “CO2 Level”

CO2 5.4.2.1 k

CO2 k

CO2 ! ! !

/ k 3

k

k

2 2 k CO2 k

Average k

Weight average CO2 k

Minimum value k

Maximum value k

KNX/



5.4.2.1 “Output”

k

“Control type “1byte k 1byte k

k 0 k

k

k

k

ppm pm 400ppm +

300ppm - 300~400ppm

k 300ppm)400ppm

“Control type” “1byte” “3byte(R=2

CO2 x k

CO2 x k

k

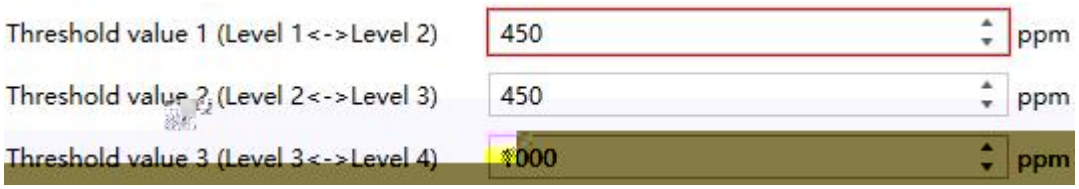
1 CO2 1 2 CO2

1 1 k

2 CO2 2 3 k

3 CO2 3 4 k

k



1~3

CO2 k

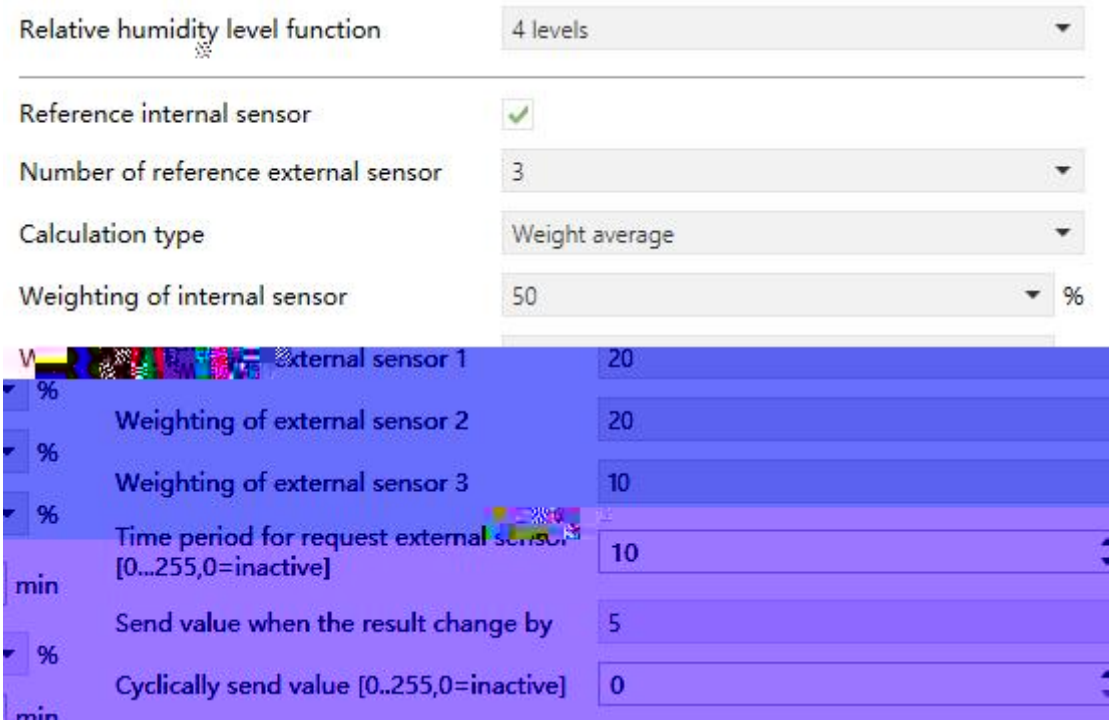
“Send value" k CO2 k

“Send additional alarm message" k CO2

14 k

k

“Send value” k k



5.4.3 “Relative humidity Level”

5.4.3.1 k

k

! ! !

/ k 3

k

k

2 2 k k

Average k

Weight average k

Minimum value k

Maximum value k

“Weight average” k k

k

k

□ □ □ □ □ □ □ k k

4?"î (c "<` _ü"" /, ` Â ypÓýñr ð Q d&„• @ k

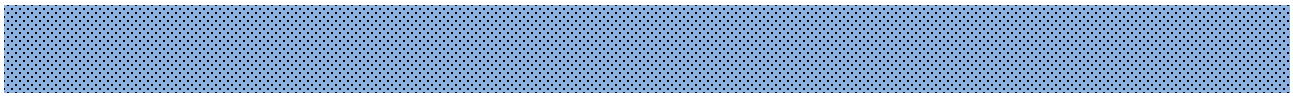
□ □ □ □ □ □ □ □ □ □



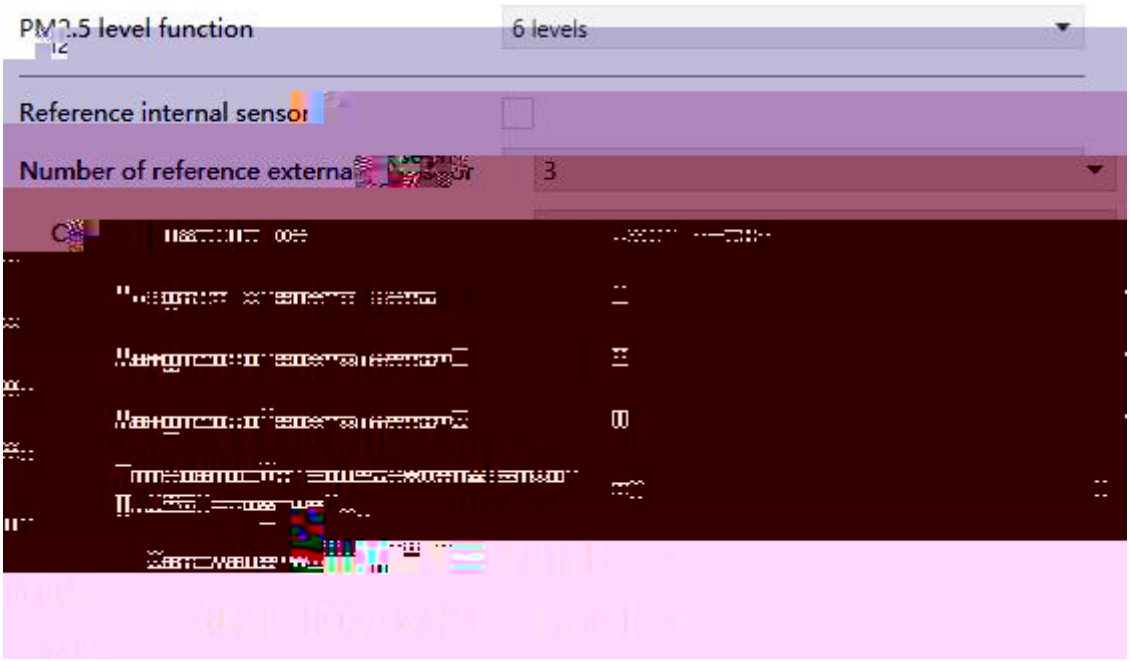
KNX/EIB

“Send additional alarm message"

14



”Send value”



5.4.4 “PM2.5 Level”

PM2.5 5.4.4.1 k

PM2.5 k

PM2.5 ! ! !

/ k

3 k

k

2 2 k PM2.5 k

Average k

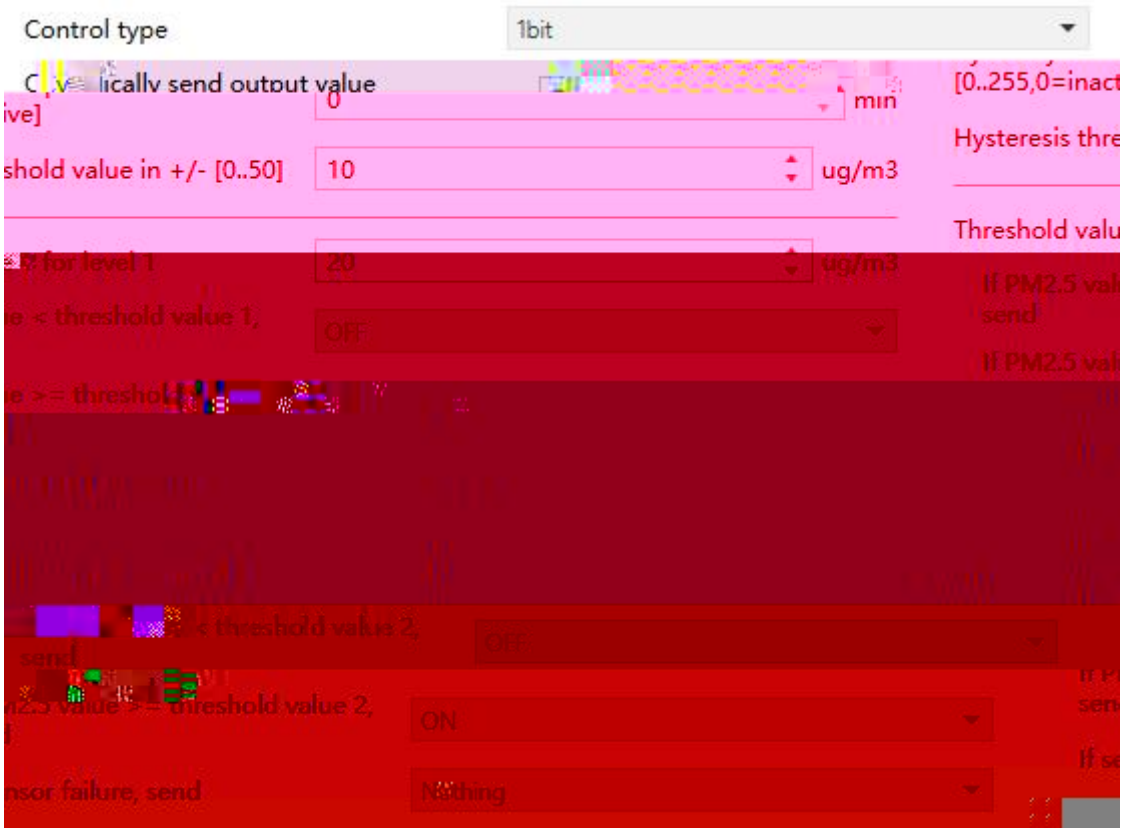
Weight average PM2.5 k

Minimum value k

Maximum value k

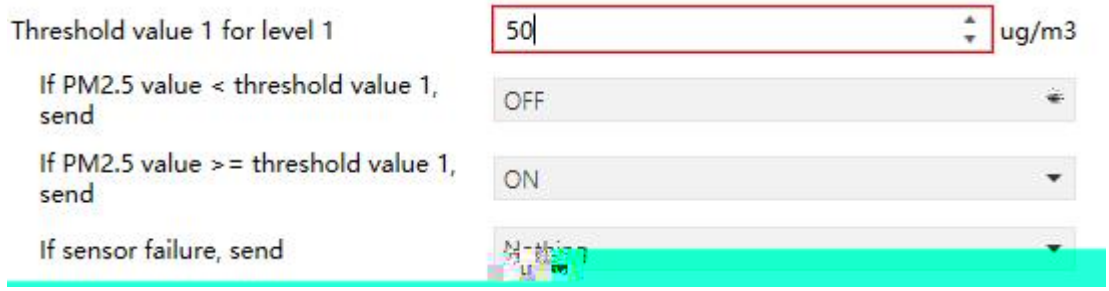
”Weight average” k PM2.5

k

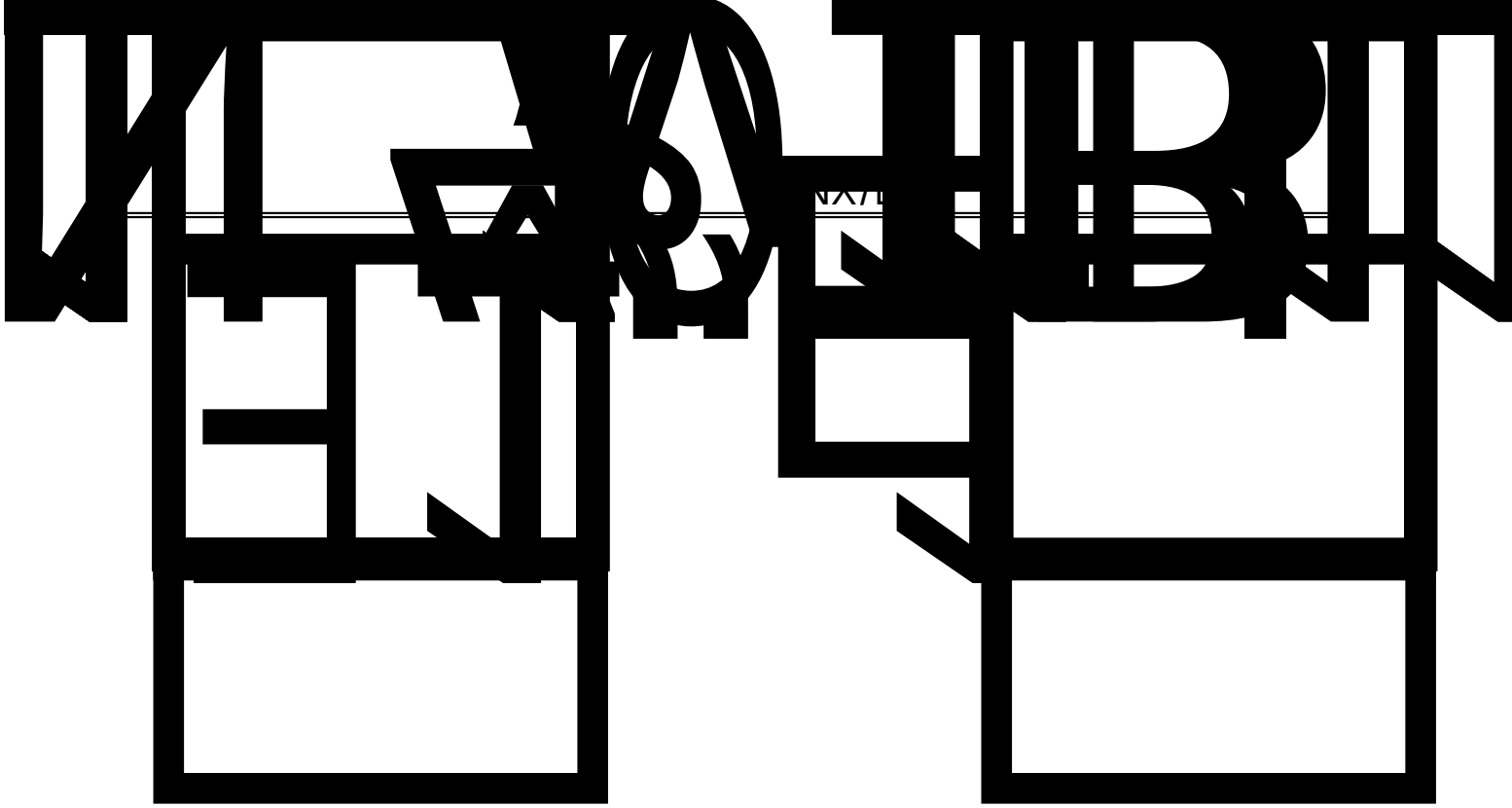


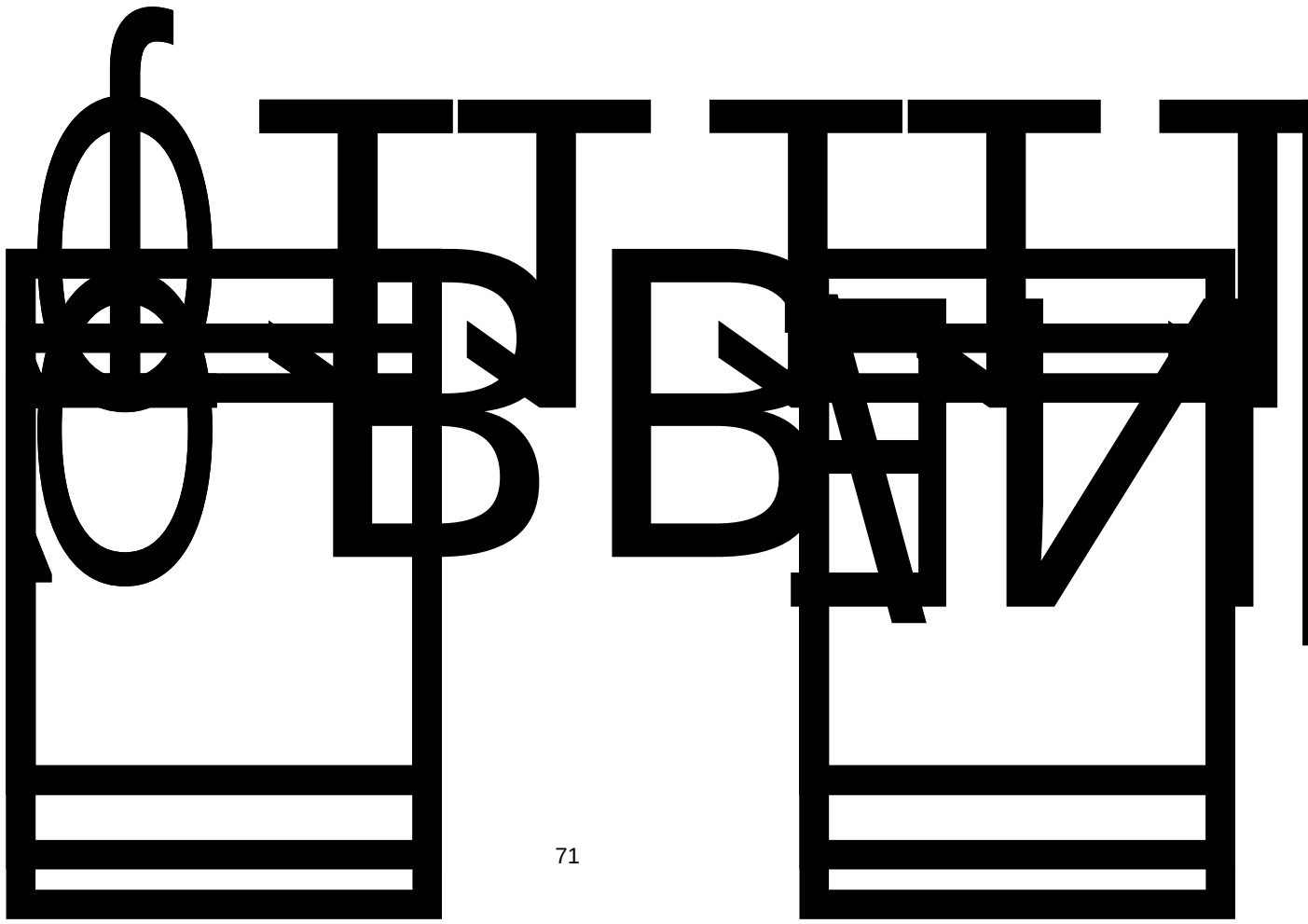
5.4.4.1 “Output”

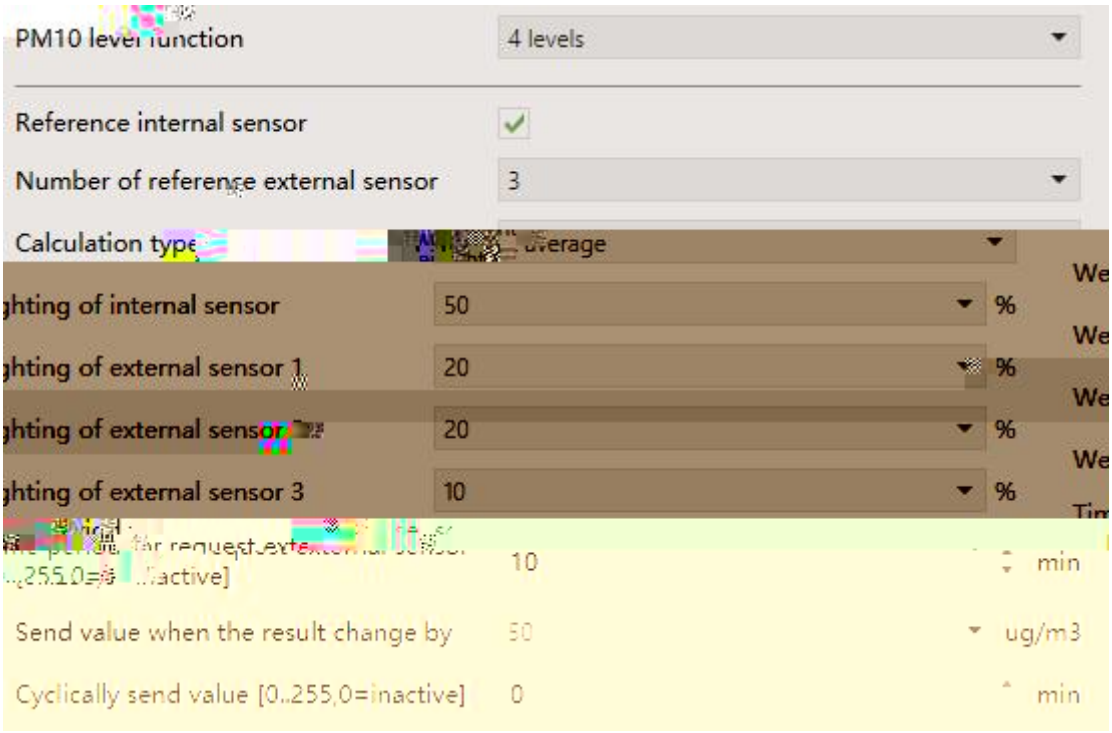
k


Threshold value 1 for level 1
50
ug/m3
If PM2.5 value < threshold value 1, send
OFF
If PM2.5 value >= threshold value 1, send
ON
If sensor failure, send

PM2.5 x k







5.4.5 “PM10 Level”

PM10 5.4.5.1 k

PM10 k

PM10 ! ! !

/ k

3 k

k

2 2 k PM10 k

Average k

Weight average PM10 k

Minimum value k

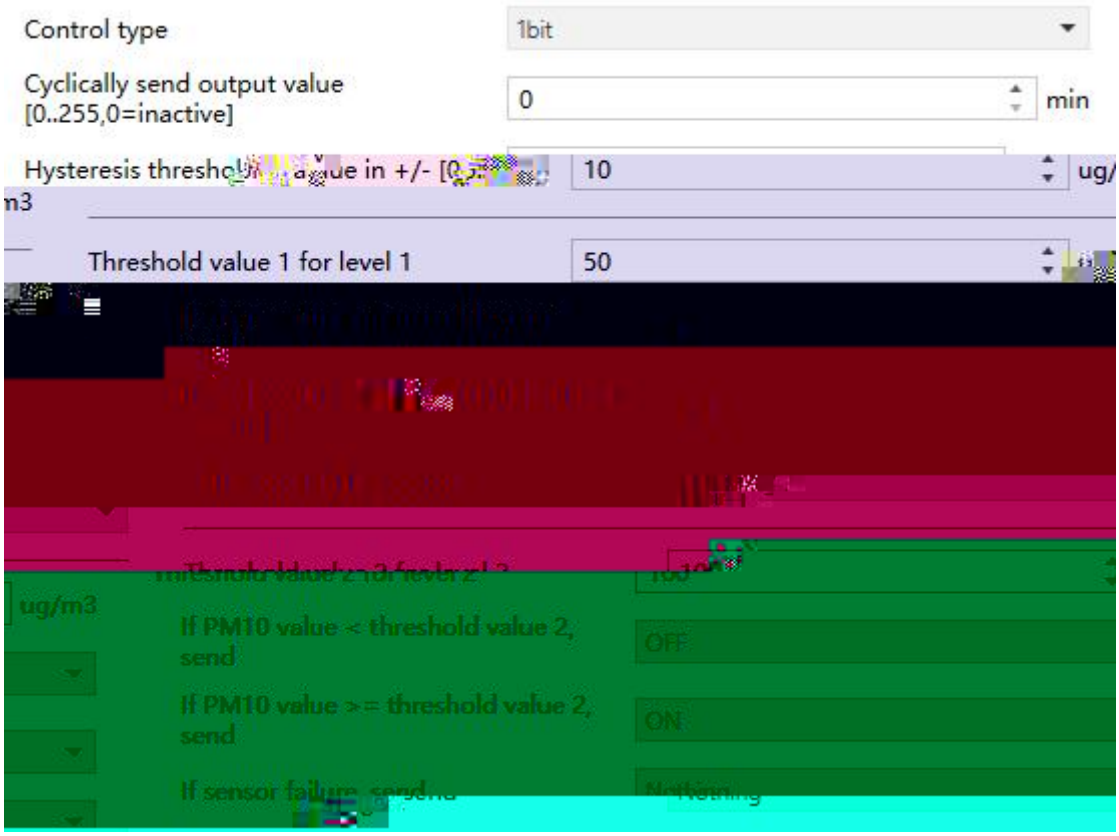
Maximum value k

“Weight average” k PM10 k

PM10 k

k

k □ □



5.4.5.1 “Output”

k

k 0 k

k

k

50ug/m3 350ug/m3 400ug/m3 +

300ug/m3 - PM10 300~400ug/m3

k 300ug/m3 ( )400ug/m3 k

“Control type” “1byte” “3byte(RGB)” k k

k

x x PM10 4 1bit 4 k

k



PM10 x k

PM10 / x k

k

1 PM10 1 2 PM10

1 1 k

KNX/EIB

KNX/E

KNX/E

TVOC k

k

k k

k

2 2 k TVOC TVOC

k Disable k

[

2 2 k TVOC k 0 k

k



5.4.6.1 “Output”

k

Control type 1byte k 1byte k

k 0 k

k

k

100ug/m3 350ug/m3 450ug/m3 +

250ug/m3 - TVOC 250~450ug/m3

k 250ug/m3 ( )450ug/m3 k

“Control type” “1byte” “3byte(RGB)” k k

k

x x TVOC 4 1bit 4 k

k



TVOC x k

TVOC / x k

k

1 TVOC 1 2 TVOC

1 1 k

2 TVOC 2 3 k

3 TVOC 3 4 k

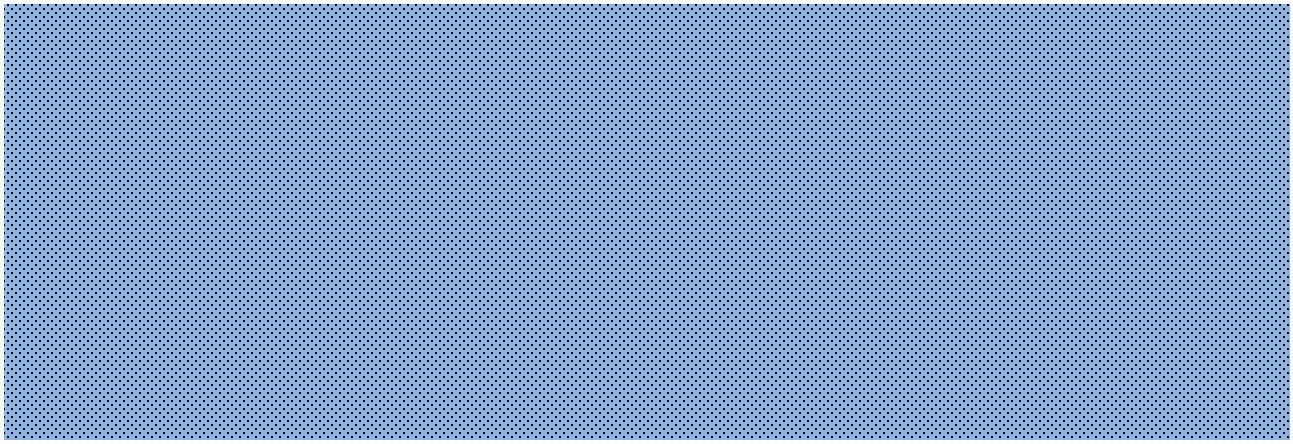
k

Threshold value 1 (Level 1<->Level 2) 0.5 ppm

Threshold value 2 (Level 2<->Level 3) 0.1 ppm

Threshold value 3 (Level 3<->Level 4) 0.5

1~3



TVOC k

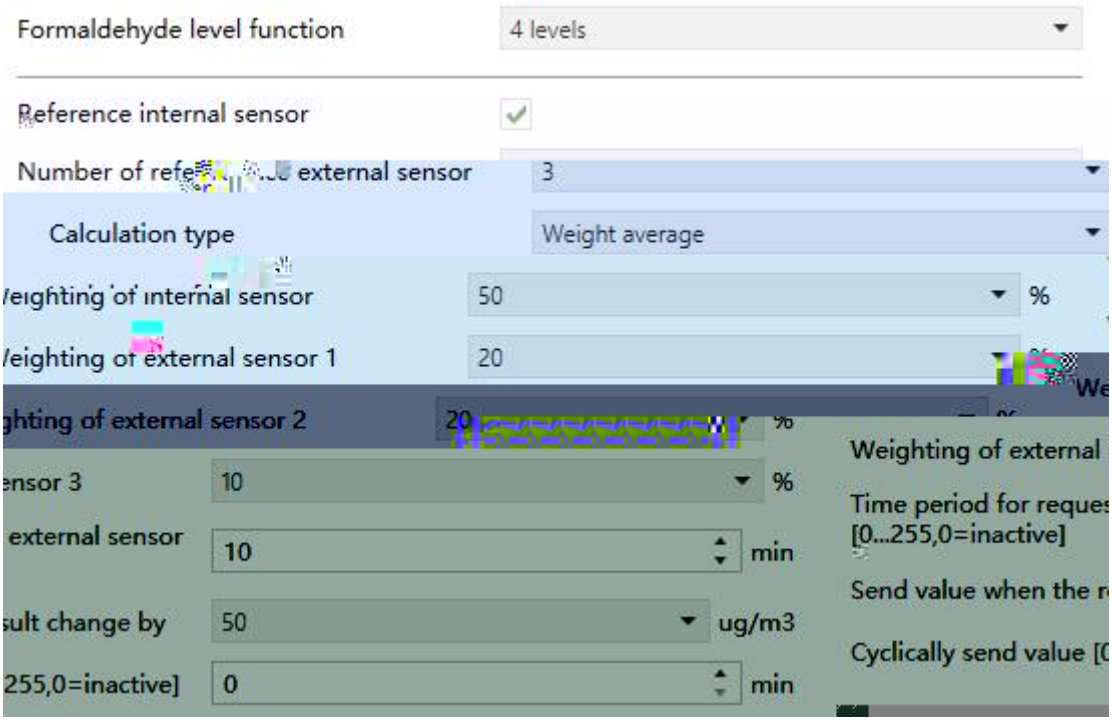
“Send value" k TVOC k

“Send additional alarm message" k TVOC

14 k

k k

”Send value” k k



5.4.7 “Formaldehyde Level”

5.4.7.1 k

k

! ! !

/ k 3

k



Average k

Weight

k

k

k

k

k

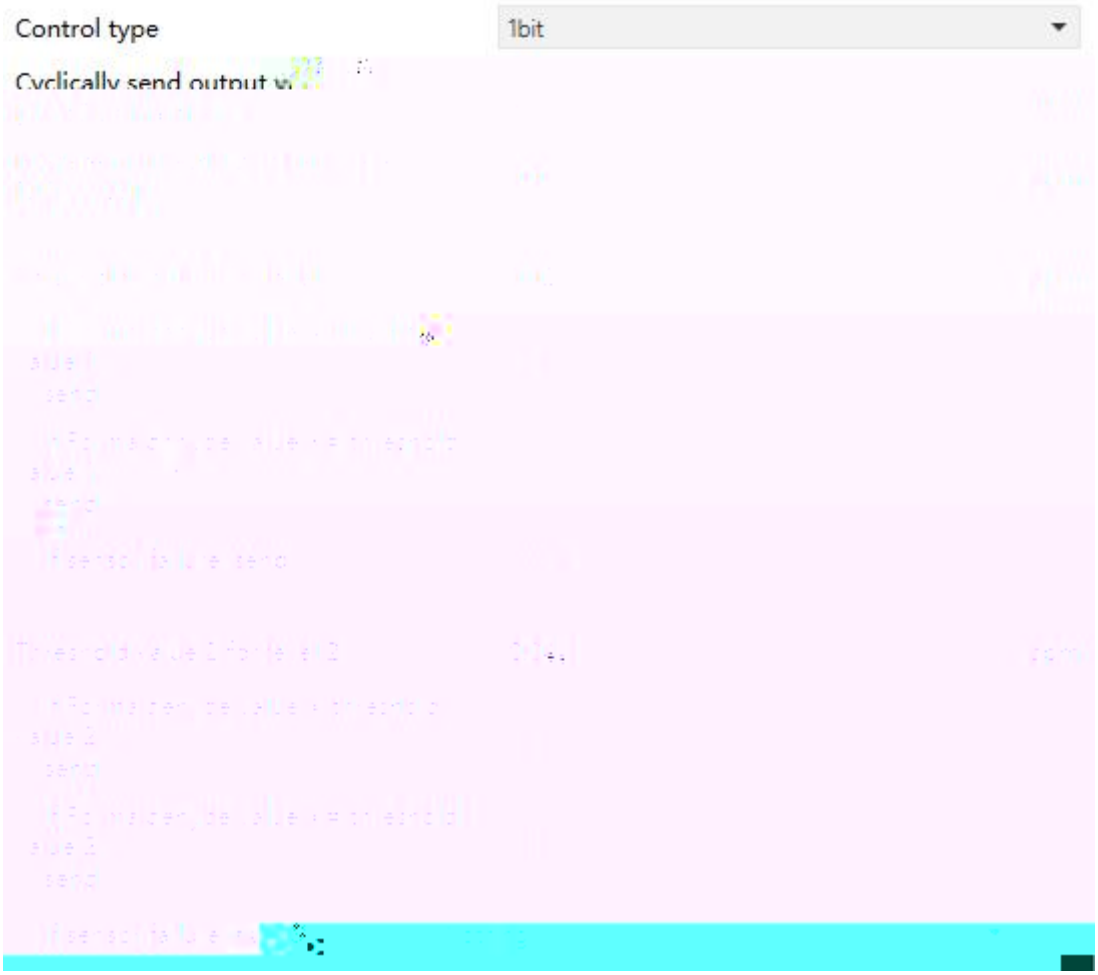
2 2 k

k Disable k

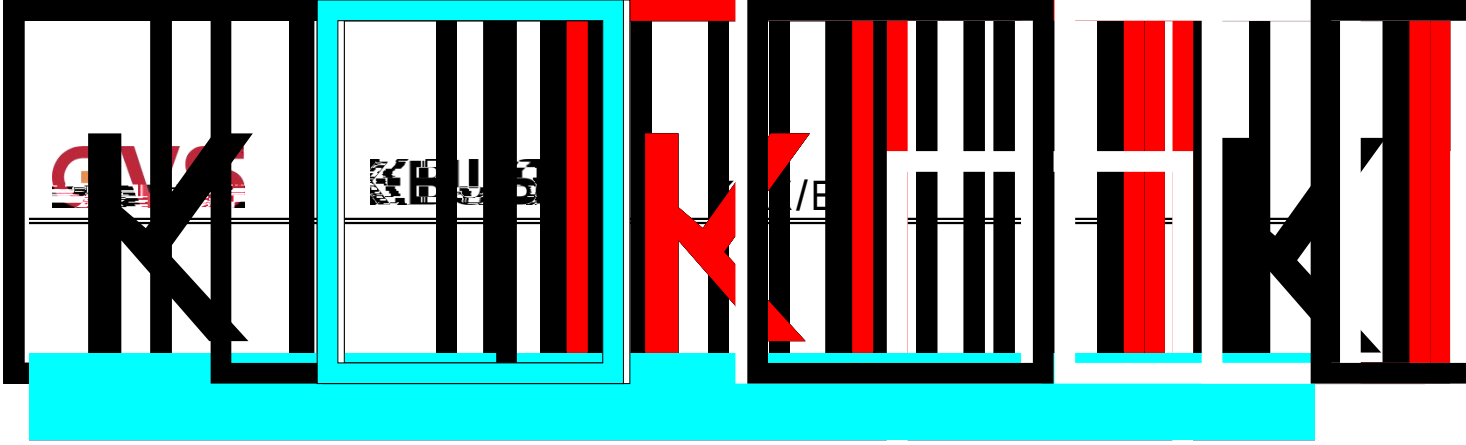
[

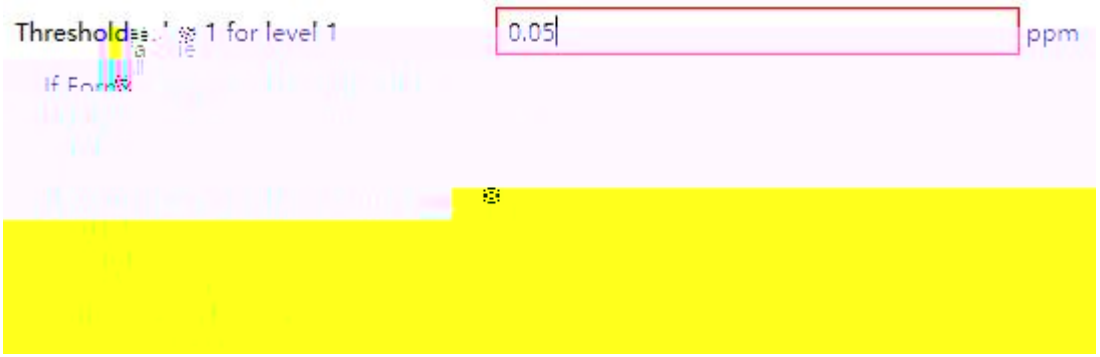
2 2 k k 0 k

k



5.4.7.1 “Output”





x k

/ x k

k

1 1 2

1 1 k

2 2 3 k

3 3 4 k

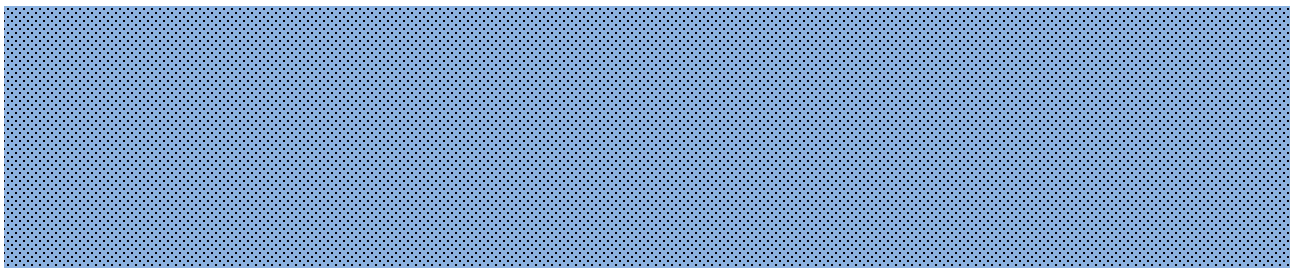
k

Threshold value 1 (Level 1<->Level 2) 0.1 ppm

Threshold value 2 (Level 2<->Level 3) 0.04 ppm

Threshold value 3 (Level 3<->Level 4) 0.1 ppm

1~3



k

“Send value" k k

“Send additional alarm message" k

14 k

k k

”Send value” k k



5.3.2 k

k k

k

“40% Internal to 60% External” 40% 60%

= ×40% + ×60%

k

k

k Disable k

0 k

k



5.5.1.1 “Output”

k

1byte k

k 0 k

k

k 1byte k

1byte percentage value

1byte unsigned value

1 1 1

1 0 k

2 2 2 k

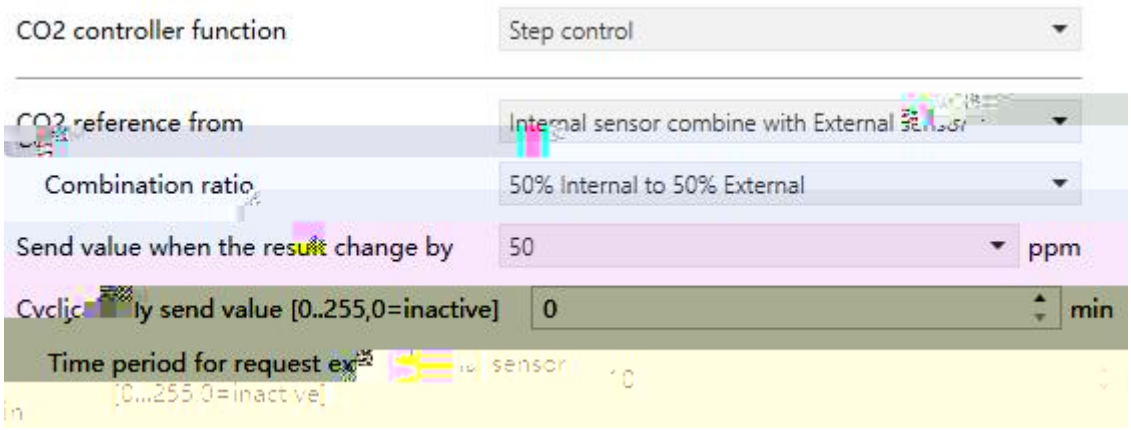
KN

“Send value” k k 1byte

k

“1byte percentage value”

“1byte unsigned value”



5.5.2 “CO2 controller”

CO2 k

Disable CO2 k

Step control k

PI control PI k

CO2 k

CO2 “Internal sensor measurement”

5.3.3 k

k CO2 k

CO2 k

“40% Internal to 60% External” 40% 60%

CO2 = CO2×40% + CO2×60%

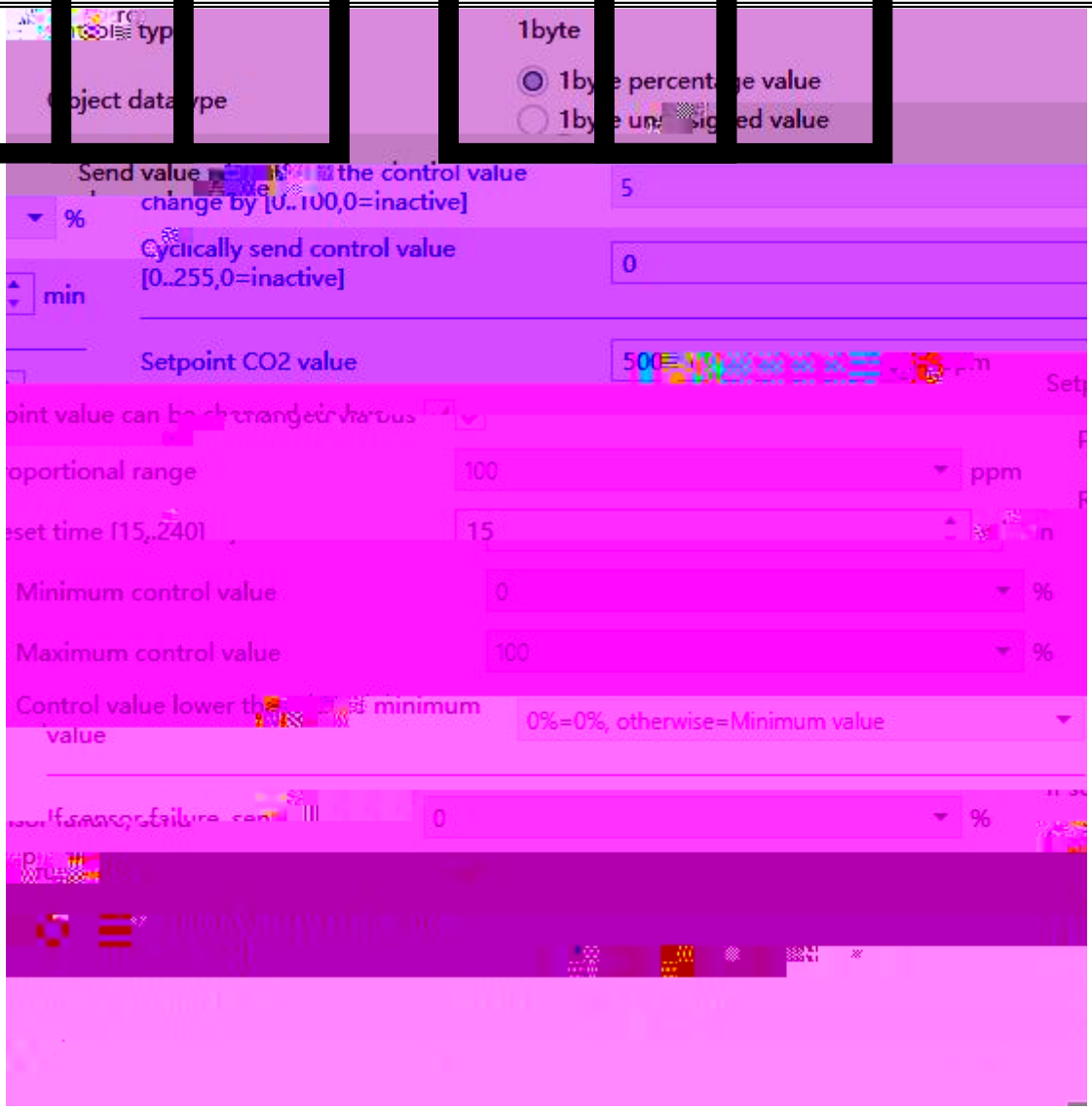
CO2 k

KNX/EI

CO2 PI k



5.5.2.1(1) “Output”-Step control



5.5.2.1(2) “Output”-PI control

k



PI PI k

/ k 1byte k

1byte percentage value

1byte unsigned value

k

k 1byte

1byte percentage value

0%=0%, otherwise=Minimum value 0% 0 k

To be the minimum value 0% k

To be 0% 0 k

k 1byte k

1byte percentage value

1byte unsigned value

k 1byte

k

k 0

k k

off k

Nothing k

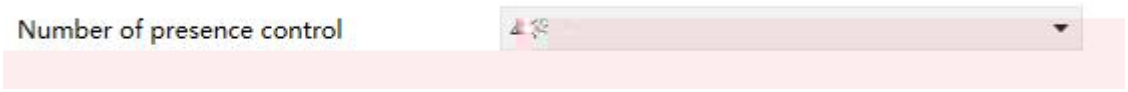
Send value k

“Send value” k k 1byte

k

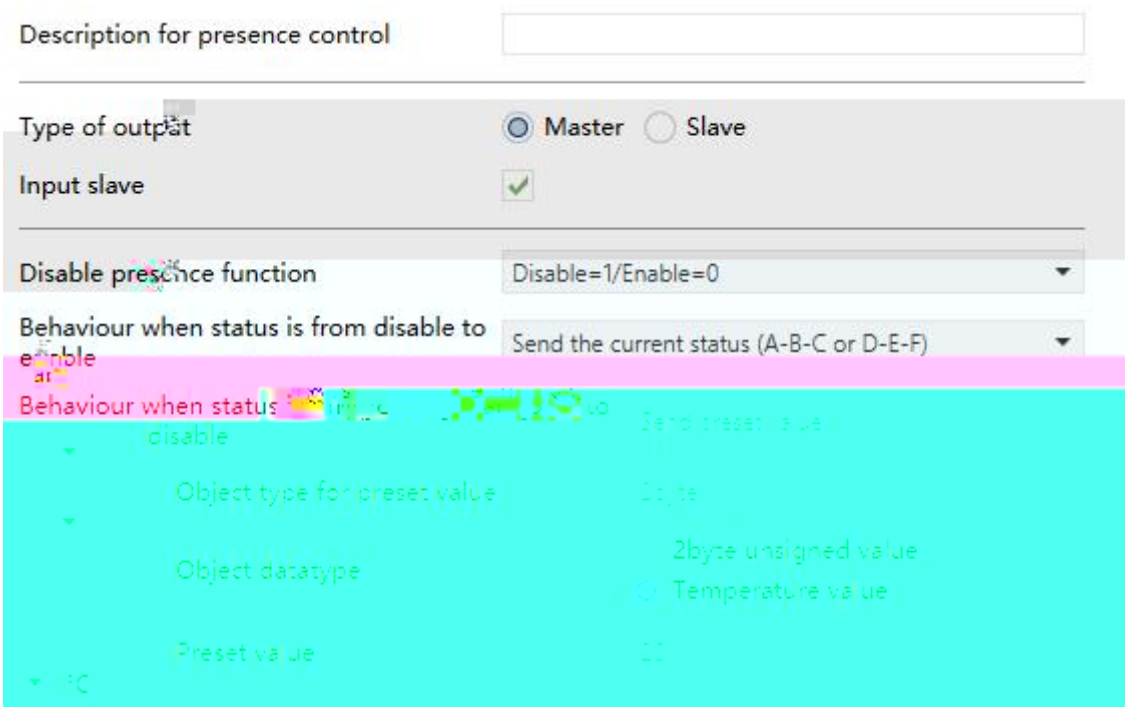
“1byte percentage value”

“1byte unsigned value”



5.4 “Presence function”

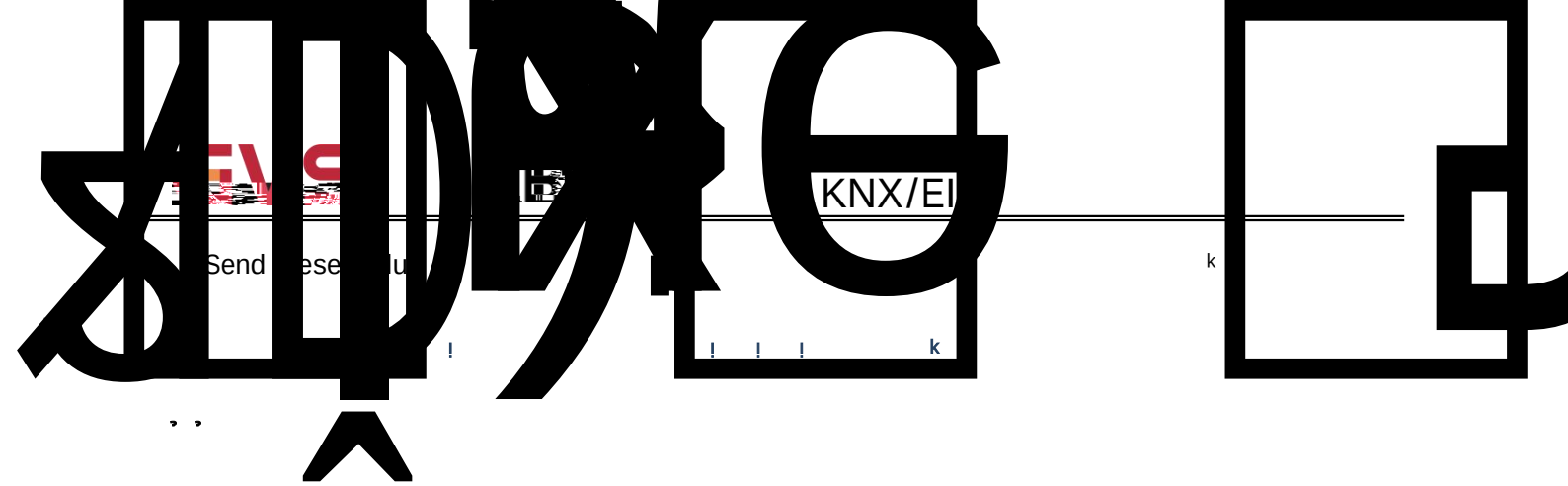
4 None k



5.6.1 “Presence control x”

30 k

KNX/EIB



“1byte” “1byte percentage value”

“1byte” “Scene number”

“1byte” “HVAC mode”

“2byte” “2byte unsigned value”

“2byte” “Temperature value”

k

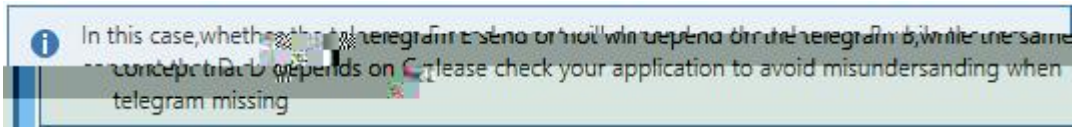

Begin of presence
If pr detected, send (A)
1bit
Value
OFF
ON
If presence still is, send (B)
1bit
Value
OFF
ON
Detect min. delay time for telegram B
[0..255,0=inactive]
60
If presence still is, send (C)
1bit
Value
OFF
ON
Detect min. delay time for telegram C
[0..255,0=inactive]
60

B k

k B E C D k

CB DE

DE



3 D / E / F k

D E F k D / E / F

D E / F k

D No telegram k

1byte 2byte k

k k k

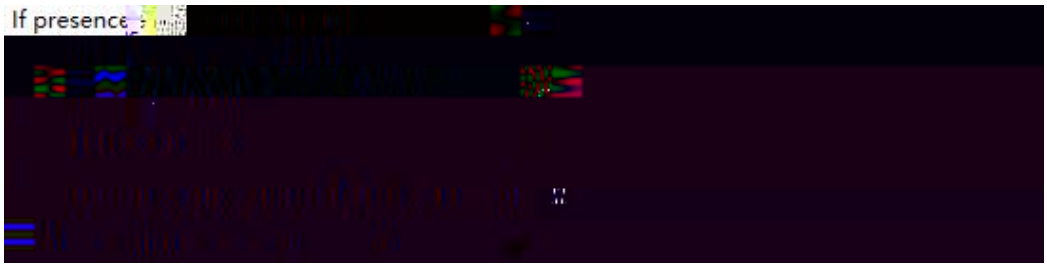
2 k

k

k

k OFF

ON k k



5.6.1.1 (2) “Output” -Slave

k

k

ON OFF k

OFF k

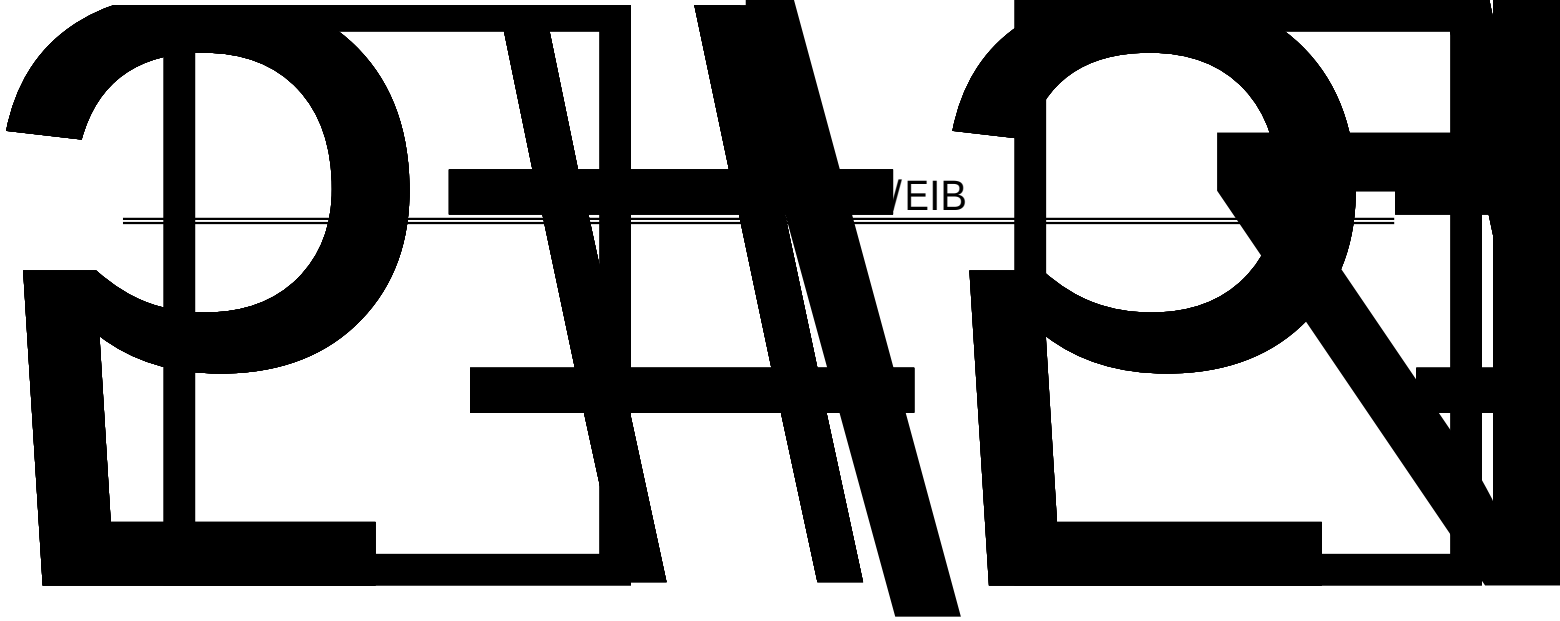
k OFF

ON k

k



5.6.1-


/EIB

KNX/EIB

k k

k

k k

k

k

k

k

+

k

k

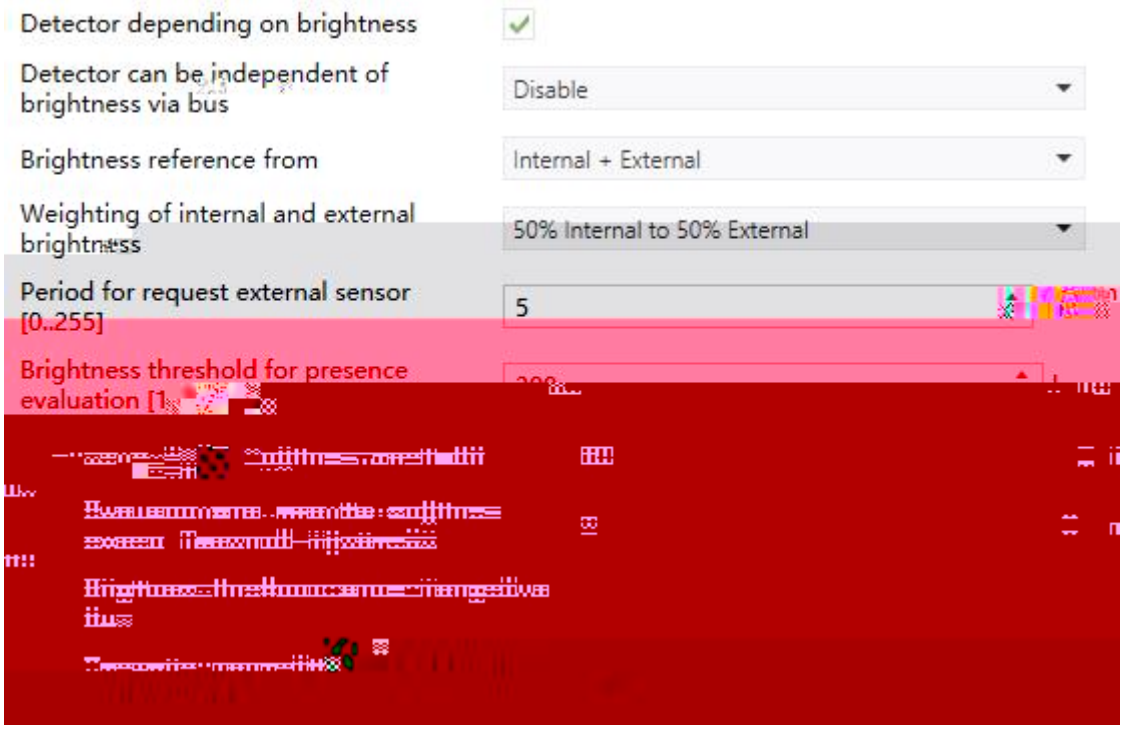
+

k

k

k k -

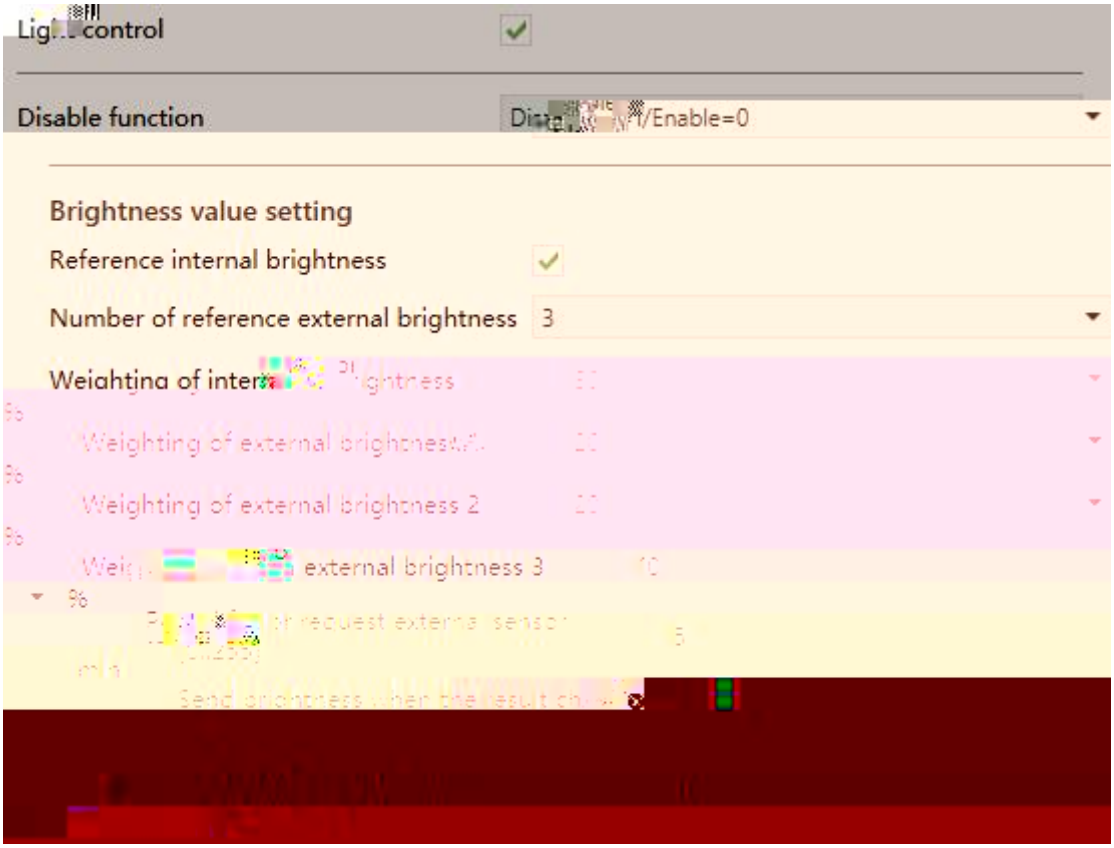
- k



5.6.1.3(2) “Brightness”-Slave

/ k

k



5.7 “Light control”

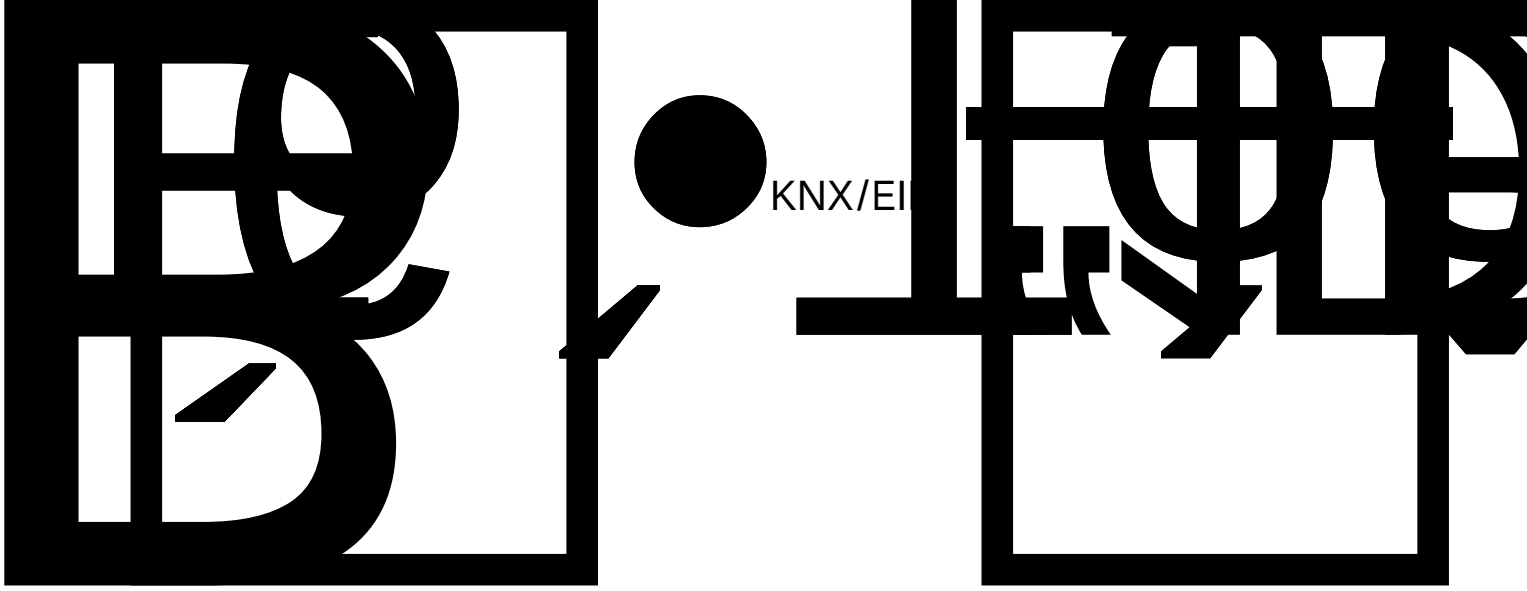
k

k

k

/ k

k


KNX/EI

k k

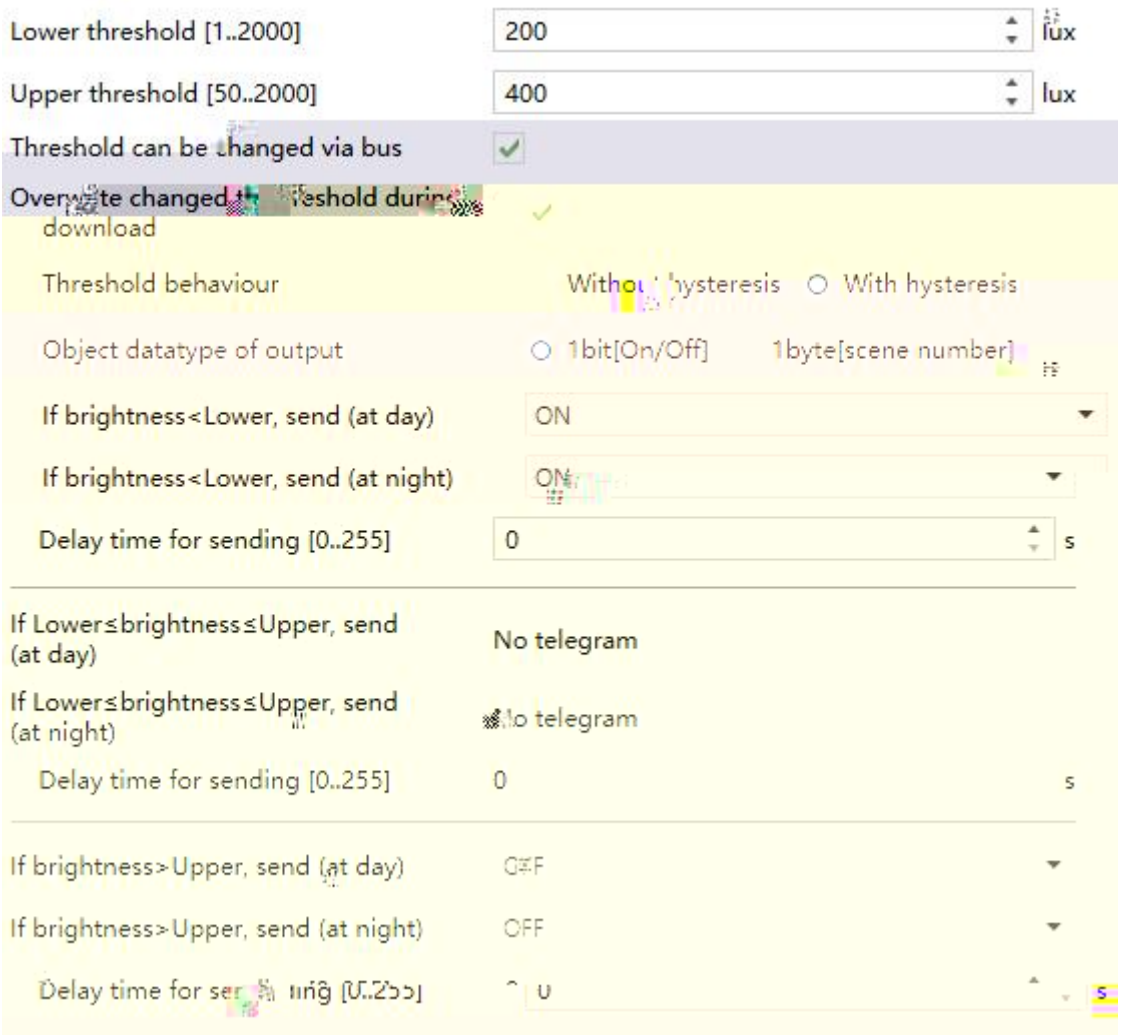
k

k

k Disable k

k k 0 k

k



5.7.1 “Output”

k

k

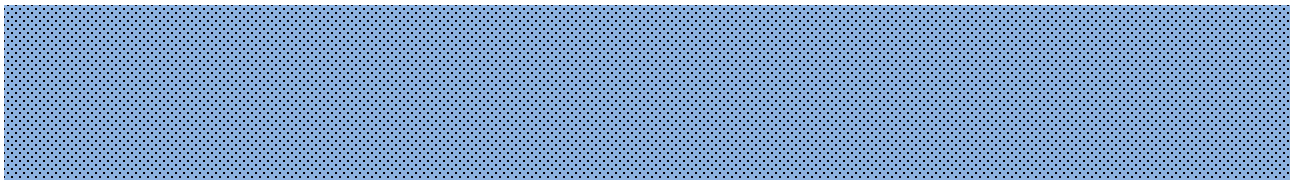
KNX

1bit

1byte

k

k



k / /

k

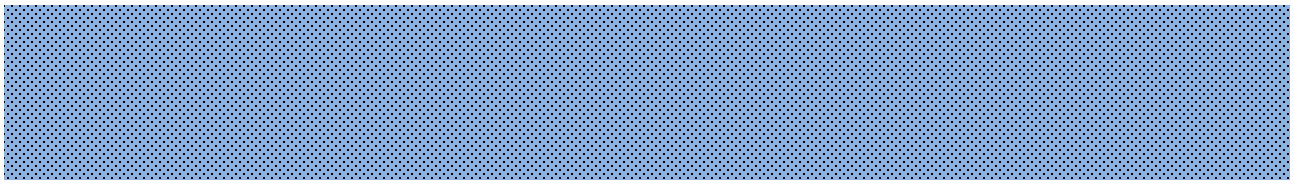
1bit

1byte

0 k

k

k



k / /

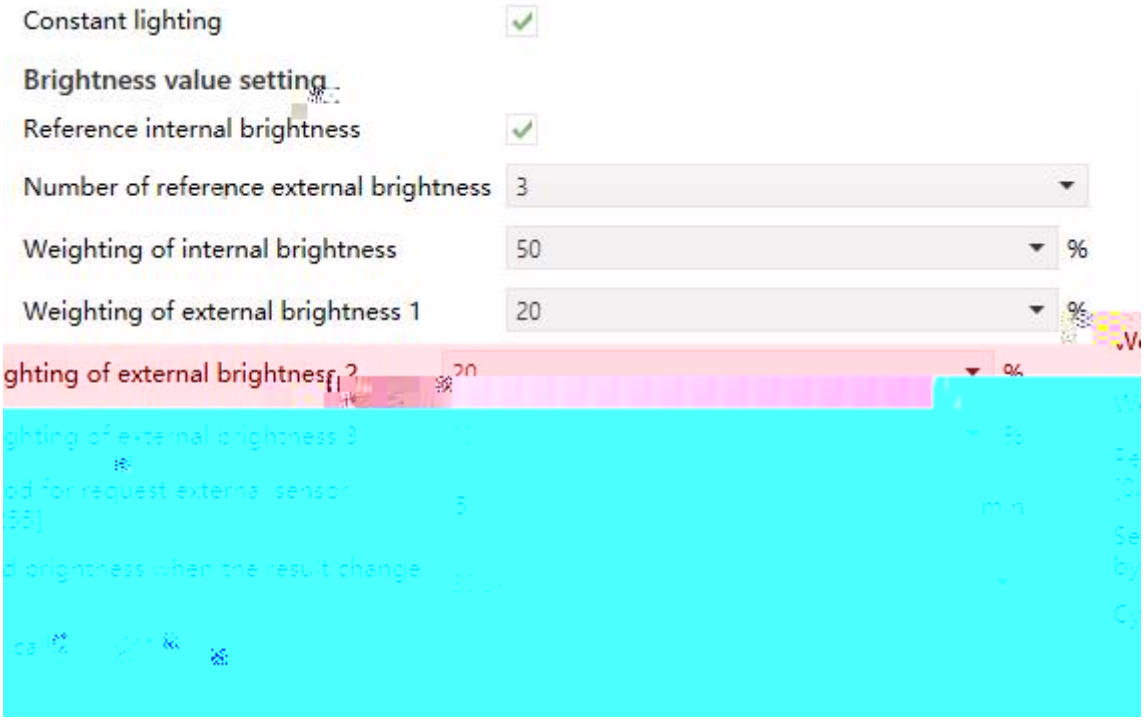
k

1bit

1byte

k

k



5.8 “Constant lighting”

k

k

k

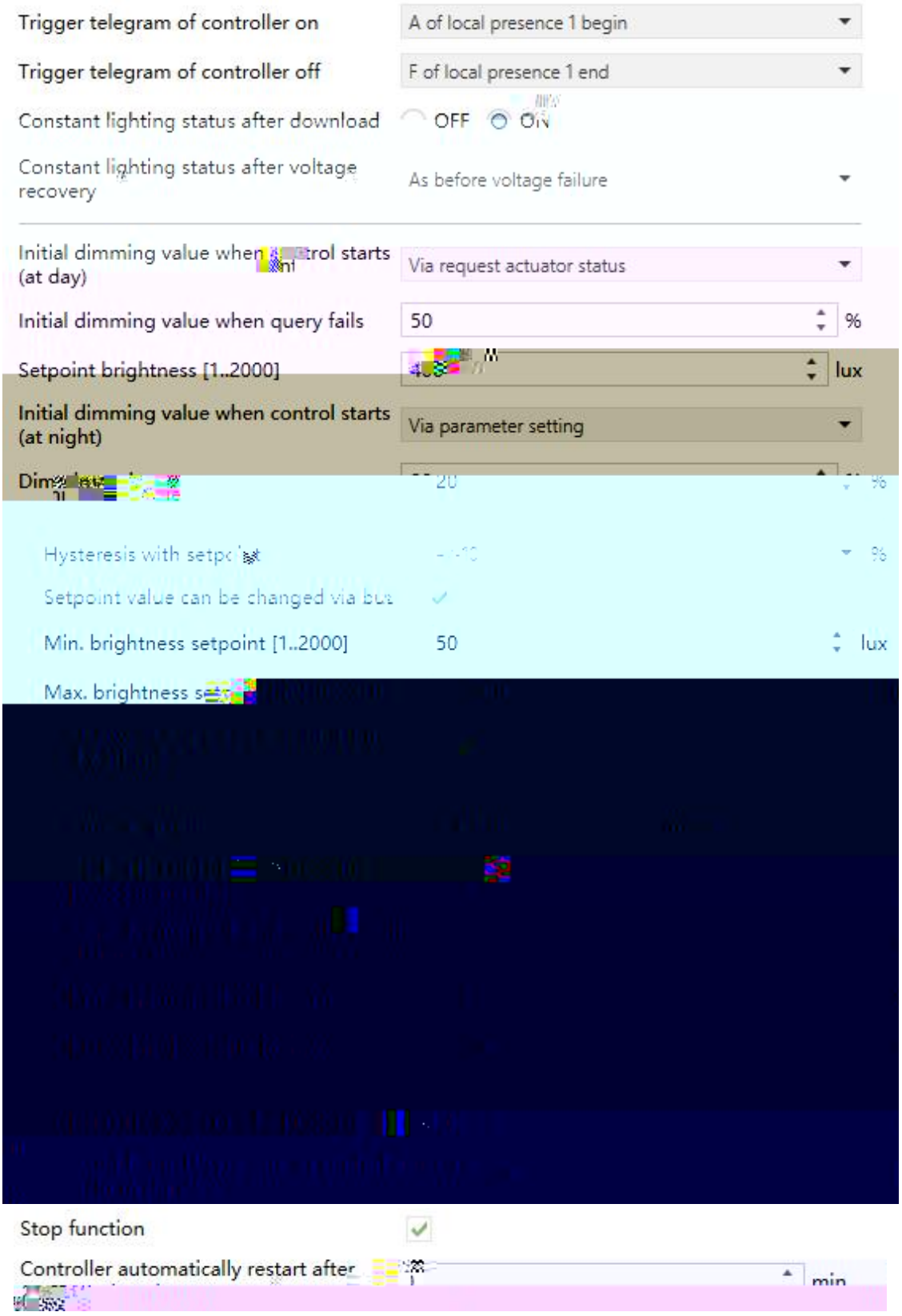
! ! +

3 k

k

k k 0 k

k

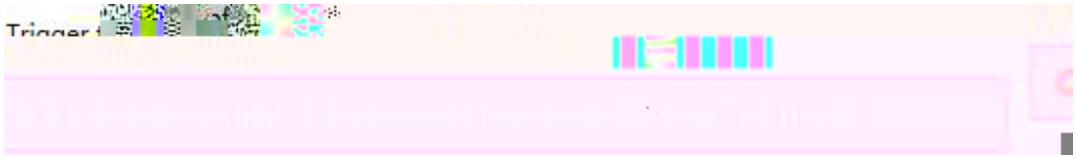

Trigger telegram of controller on
A of local presence 1 begin
Trigger telegram of controller off
F of local presence 1 end
Constant lighting status after download
OFF
ON
Constant lighting status after voltage recovery
As before voltage failure
Initial dimming value when control starts (at day)
Via request actuator status
Initial dimming value when query fails
50
%
Setpoint brightness [1..2000]
lux
Initial dimming value when control starts (at night)
Via parameter setting
20
%
Hysteresis with setpoint
%
Setpoint value can be changed via bus
Min. brightness setpoint [1..2000]
50
lux
Max. brightness setpoint
Stop function
Controller automatically restart after
min

5.8.1 “Output”

k

None

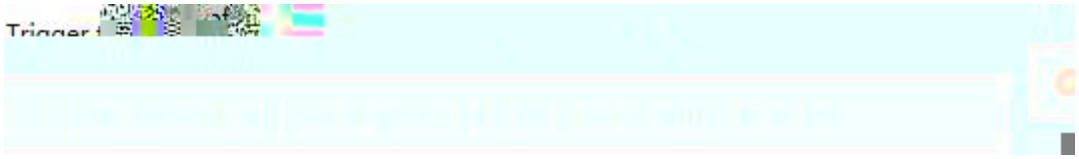
k



k

None

k



k

k

k

[redacted]

“Via parame[redacted]setting

k

Ô

+ +

- - k

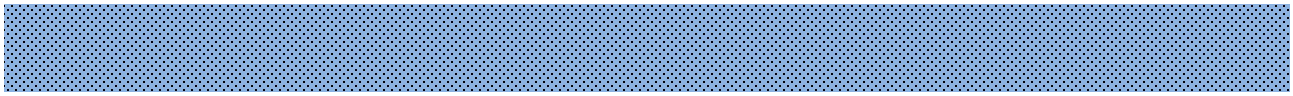
k

k



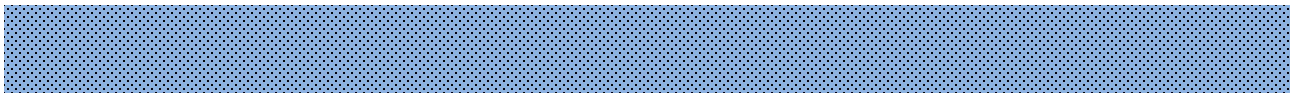
k - -

k



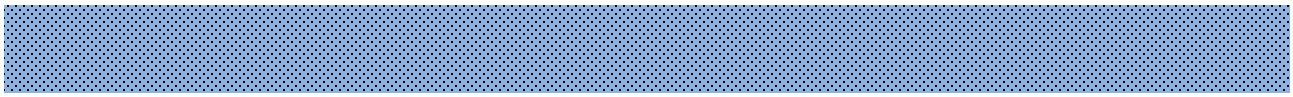
k 200 1

0.5% k

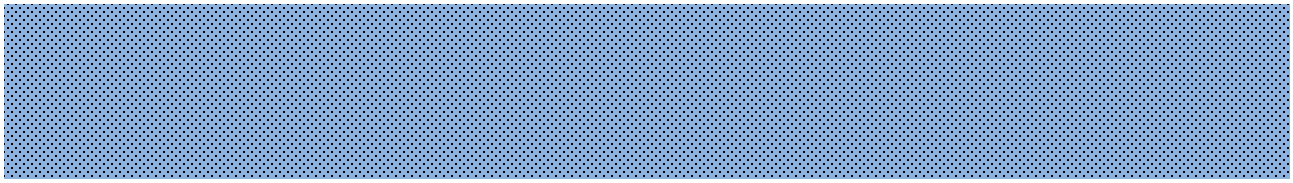


k 0 k

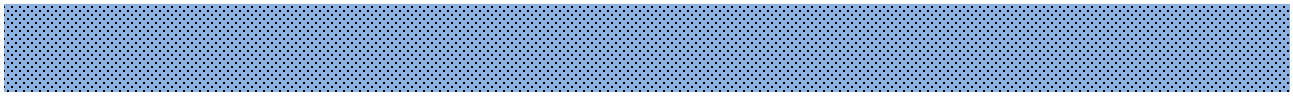
k



k



/ k



k

+

0% k 0 k

k

0 k k

“ - - ” k

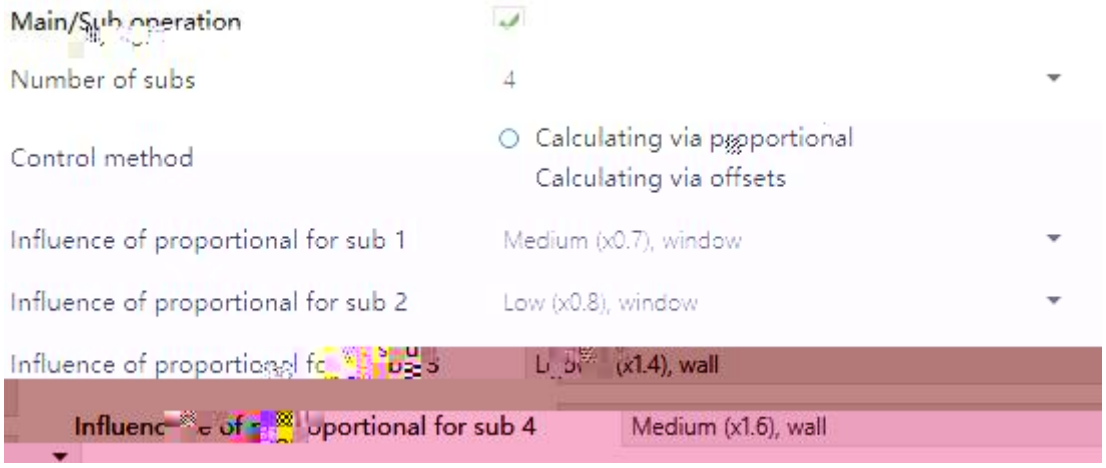
k

k 1bit/4bit/1byte

k

k

k □



5.8.2(1) “Main-Sub operation”



5.8.2(2) “Main-Sub operation”

/ k

4 k

k

x

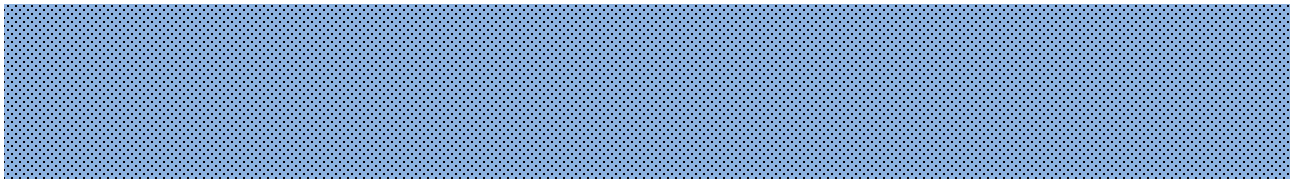
k

No change (x1) k

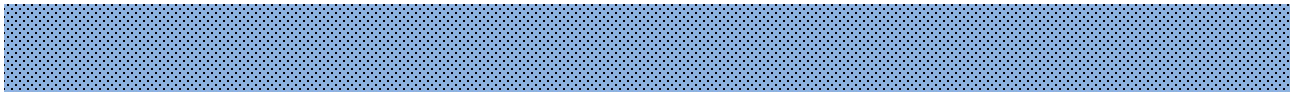
Very high (x0.5), window Very high (x2.0), wall

k

k



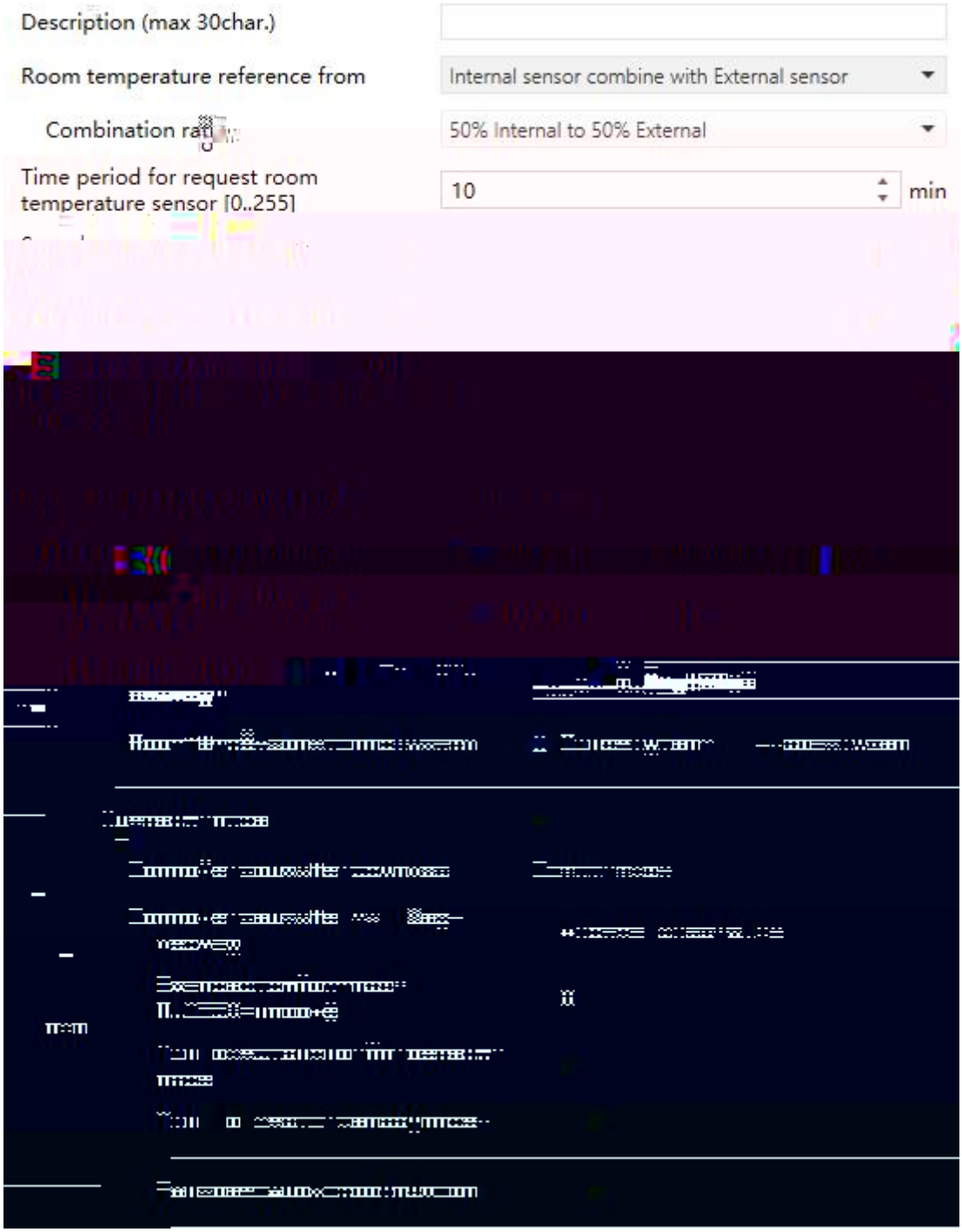
x / k

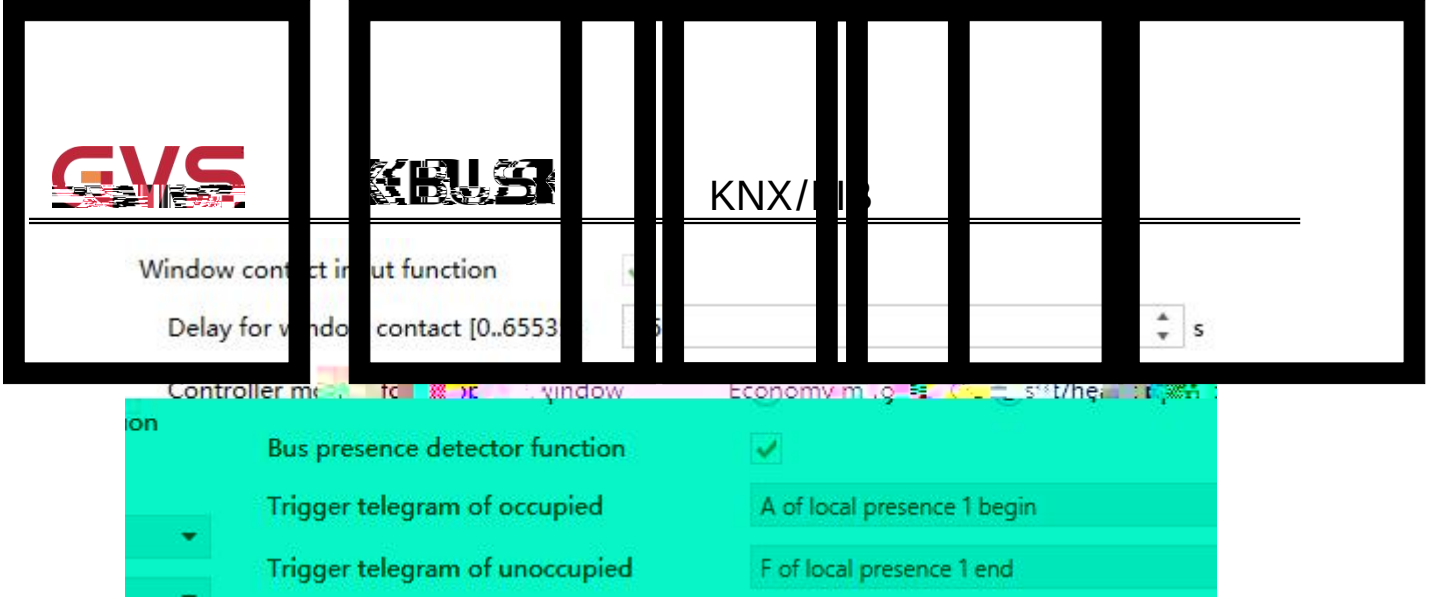


x k



5.9“Room temperature controller”





5.9 “RTC x-...”

3 k

k

k

“Internal sensor measurement” 5.3 k

k k

“40% Internal to 60% External” 40% 60%

= ×40% + ×60%

k

k

k Disable k

0 k

k

k

0 0 0

1 k

k

pipes system

k

k

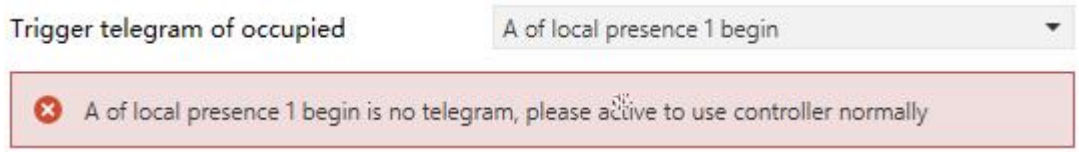
RTC k

! ! 4 1bit 1byte

k

None

k



k

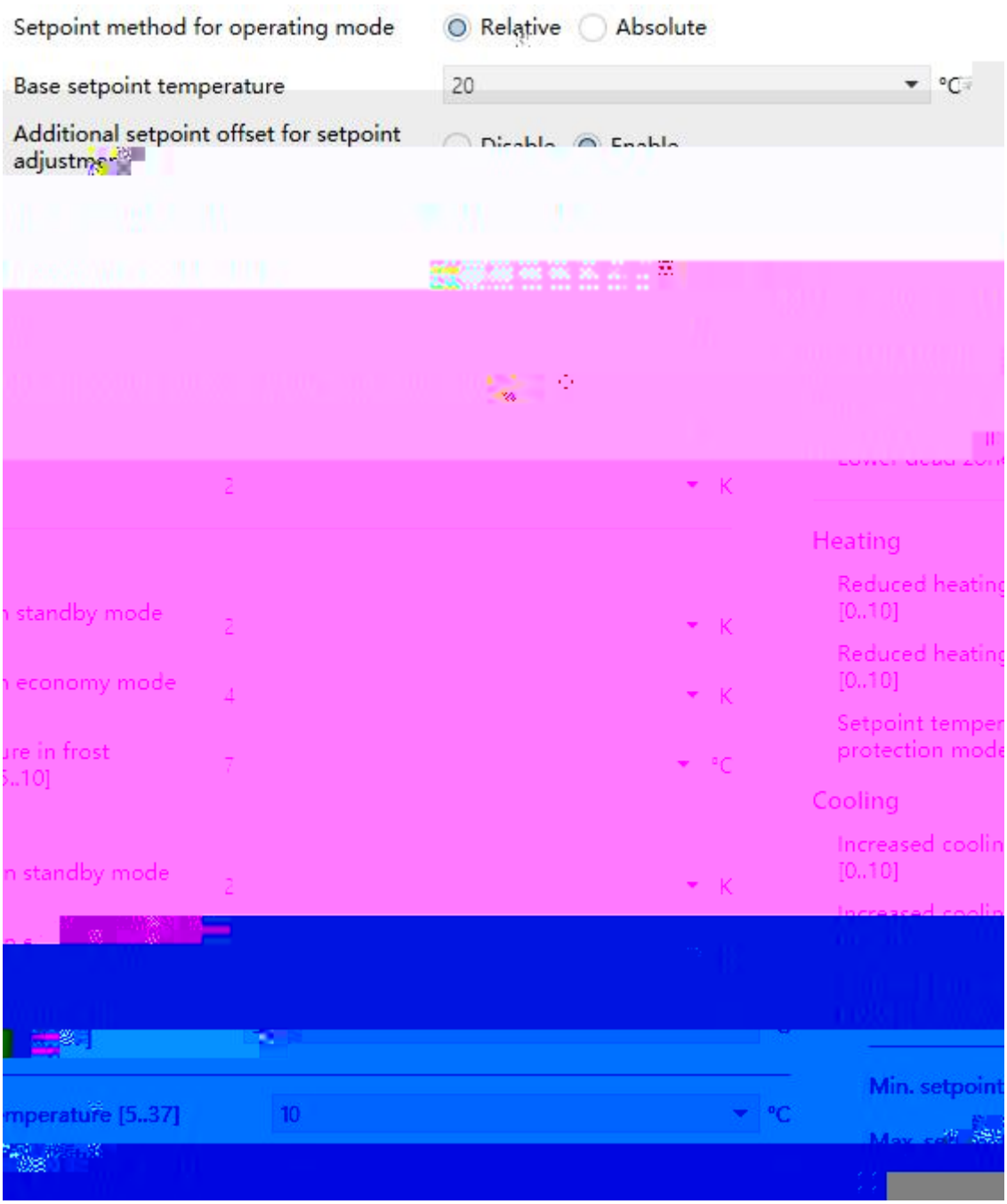
None

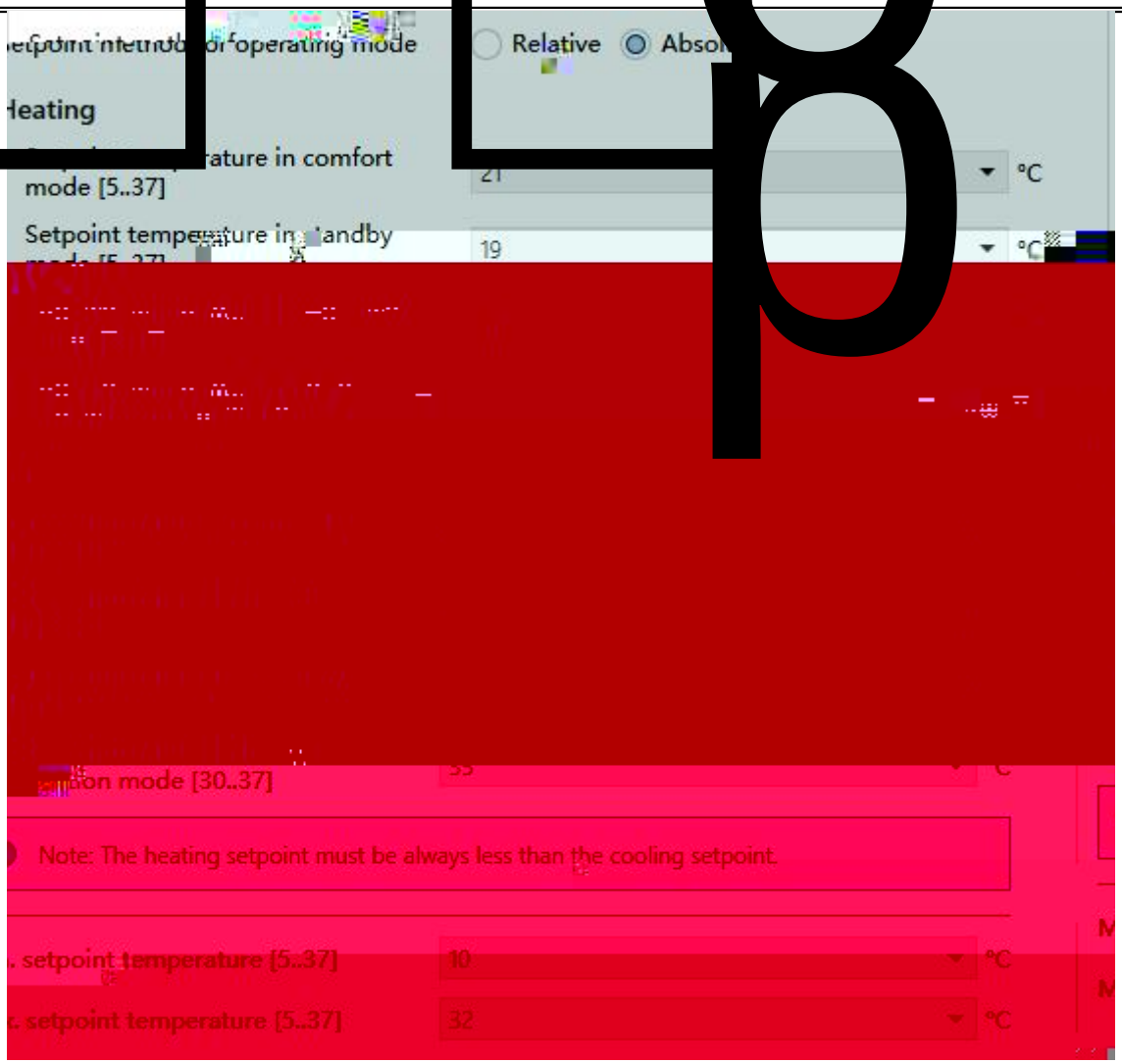
k



k

k


Setpoint method for operating mode
Relative
Absolute
Base setpoint temperature
20
°C
Additional setpoint offset for setpoint adjustm
Heating
Cooling
K
°C
standby mode
economy mode
Min. setpoint
10



5.9.1 “Setpoint”

k

k

Relative

k

Λ

k

-

□□

-

-

k

k

“Base setpoint adjustment” k

k !

k

1bit

k

2byte

2byte“Float offset value” k k

k

/ 1- 0- k

k

k

k

k

k

k

k

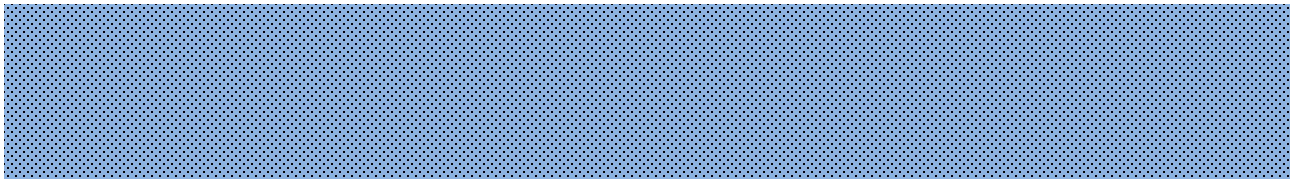
“Heating and Cooling” “Automatic changeover” k

k

+

-

k

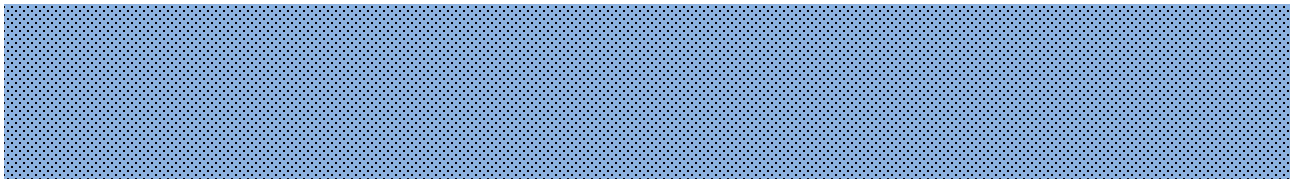


k

Heating

Cooling

k

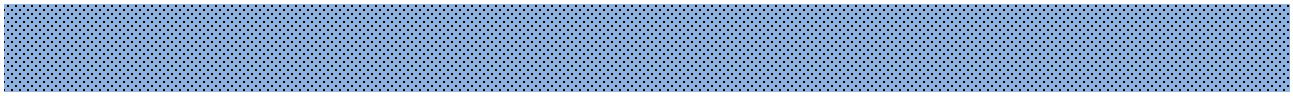


k

Heating

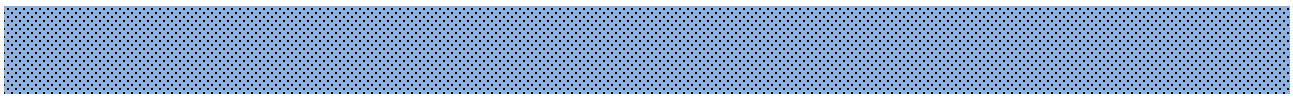
Cooling

k



k

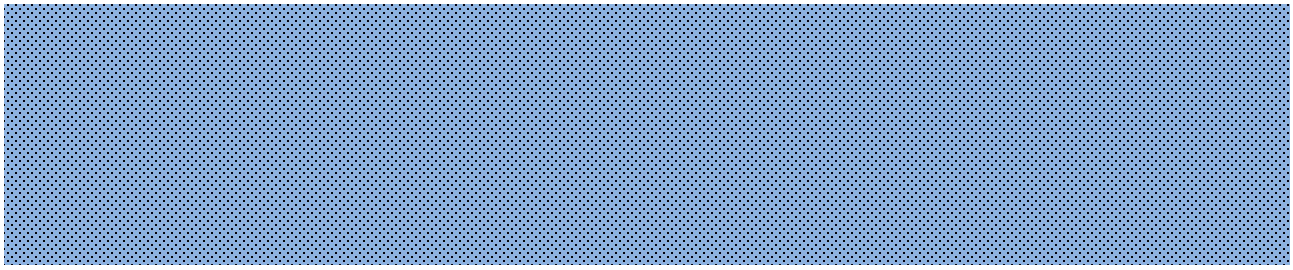
k



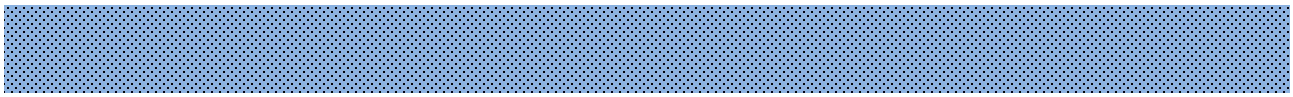
k

k

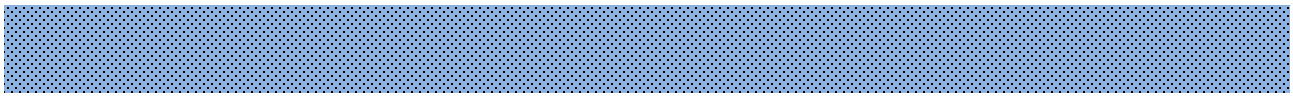
k



! k



k



k

Note: The heating setpoint must be always less than the cooling setpoint.

k

k

1.

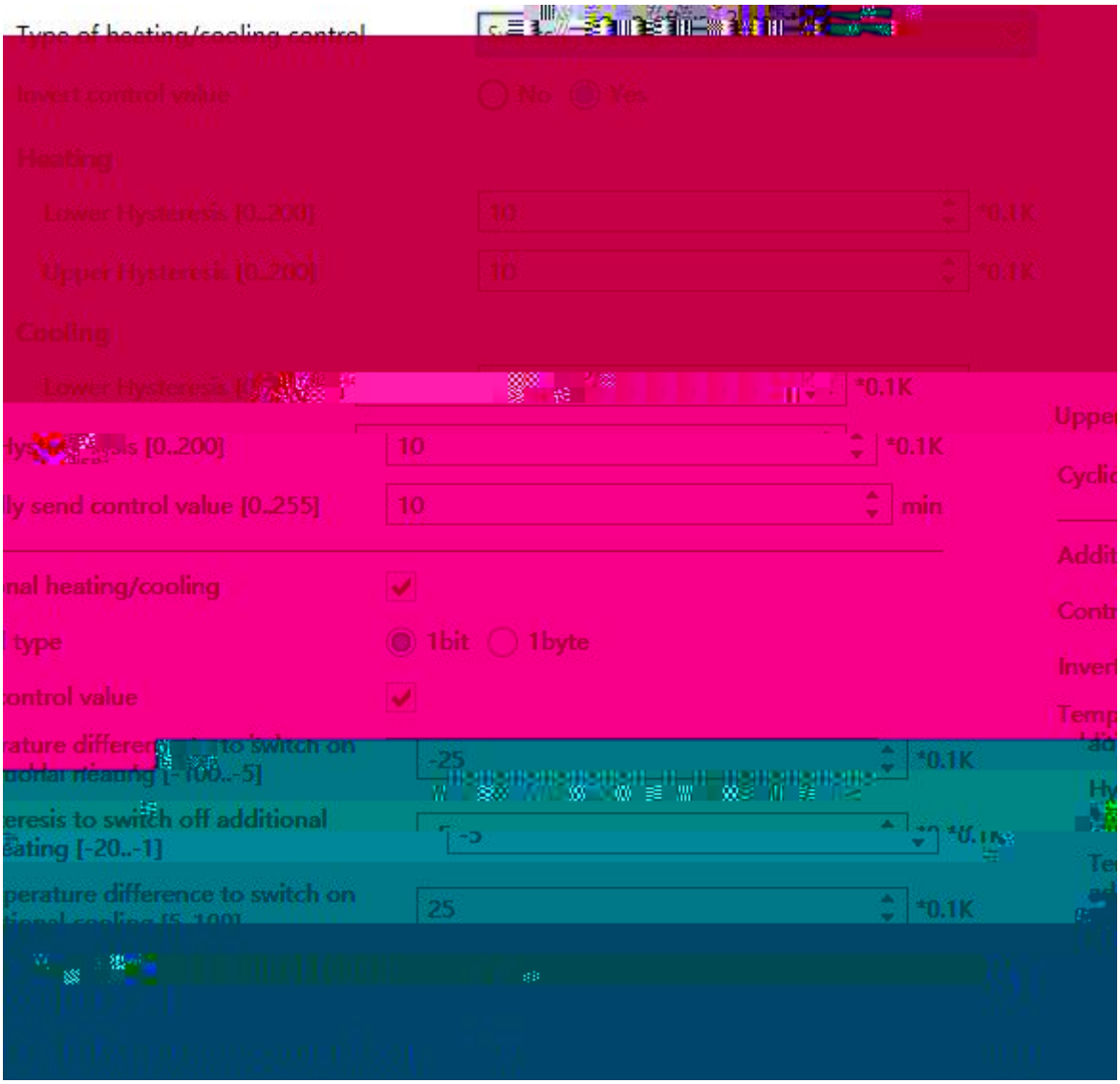
k

2. k

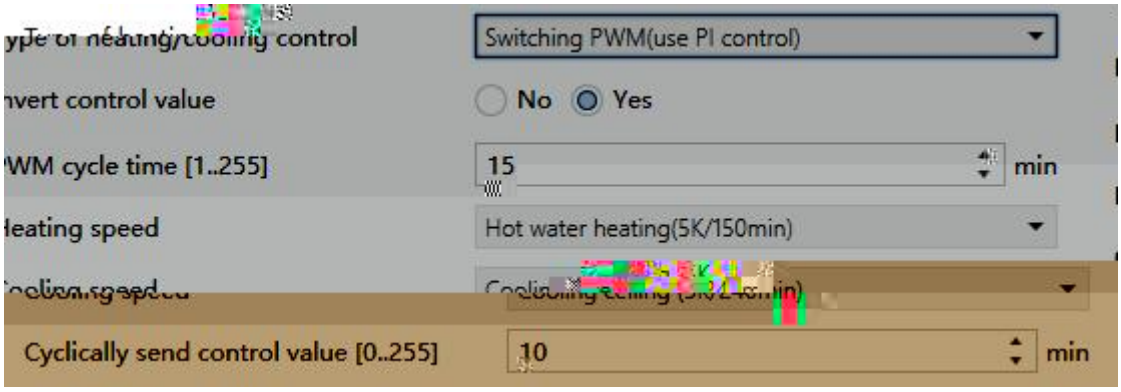
k

3.

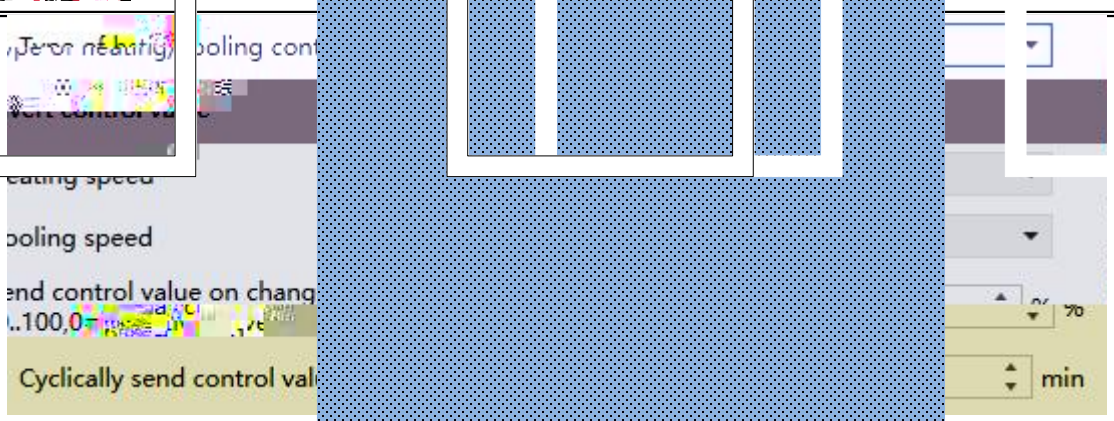
k



"Switching on/off(use 2-point control)"



"Switching PWM(use PI control)"



/

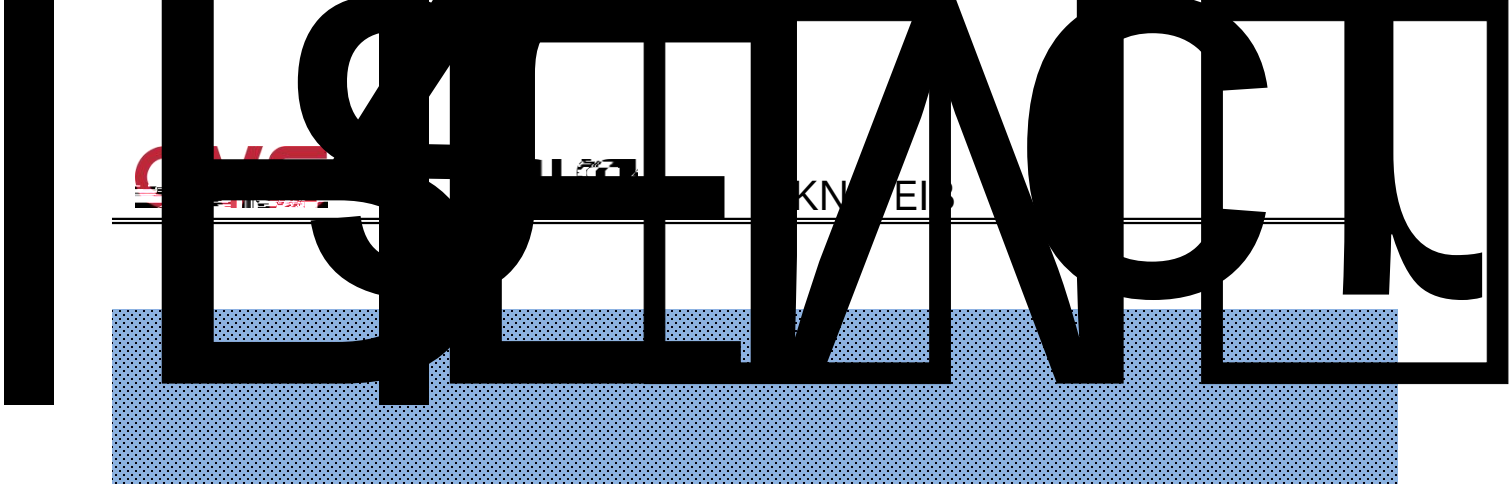
k

o

□□

k

1K 2K 22 T 24



PI k k

“Switching

	4K	90min	PWM	10-15min
	4K	90min	Continuous	--

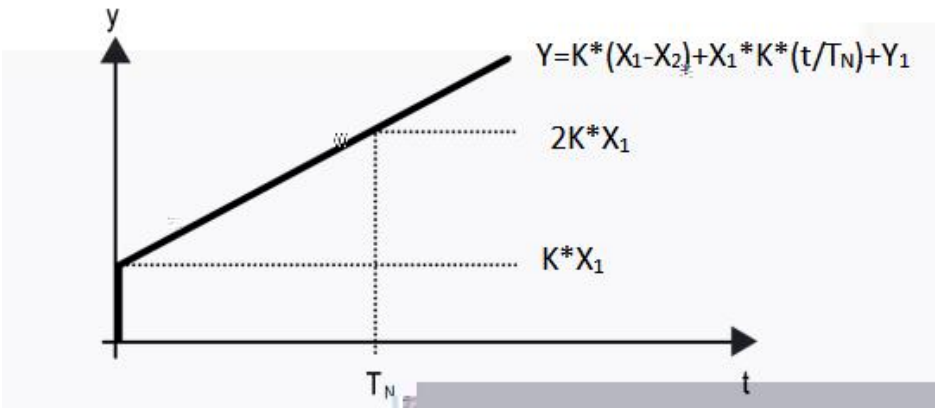
	5K	240min	PWM	15-20mIn
	4K	90min	PWM	10-15min
	4K	90min	Continuous	--

“Heating/Cooling speed” “User defined” P

I k PI

k

k 0 k



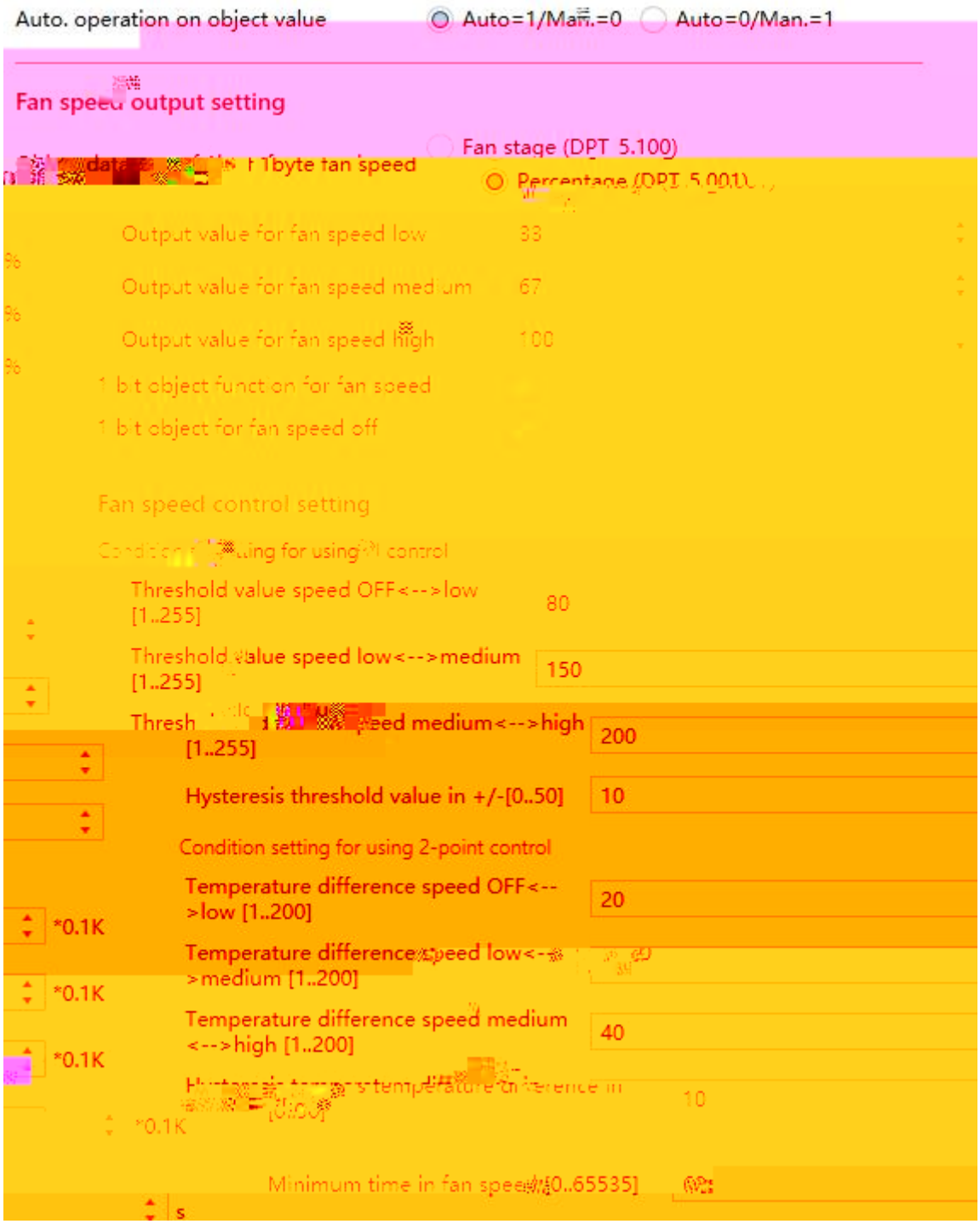
5.5.2(3) PI

Y

Y1

KNX/EIB

KNX/EIB


Auto. operation on object value
Auto=1/Man.=0
Auto=0/Man.=1
Fan speed output setting
Fan stage (DPT 5.100)
1byte fan speed
Percentage (DPT 5.001)
Output value for fan speed low
33
%
Output value for fan speed medium
67
%
Output value for fan speed high
100
%
1 bit object function for fan speed
1 bit object for fan speed off
Fan speed control setting
control
Threshold value speed OFF<-->low [1..255]
80
Threshold value speed low<-->medium [1..255]
150
[1..255]
200
Hysteresis threshold value in +/-[0..50]
10
Condition setting for using 2-point control
Temperature difference speed OFF<-->low [1..200]
20
*0.1K
Temperature difference speed low<-->medium [1..200]
*0.1K
Temperature difference speed medium <-->high [1..200]
40
*0.1K
10
*0.1K
Minimum time in fan speed [0..65535]
s

5.9.3 “Fan”

k

k

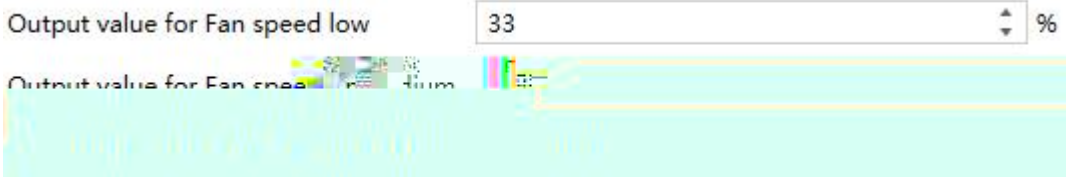
Auto=1/Man.=0	“Fan automatic operation”	“0”	“1”
Auto=0/Man.=1	“Fan automatic operation”	“1”	“0”

k

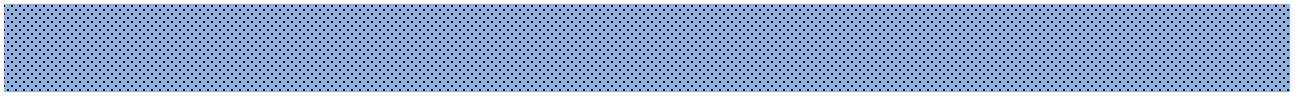
k

1byte k

k 0 k

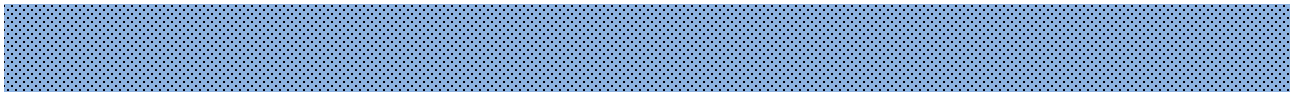


1bit k 1bit k



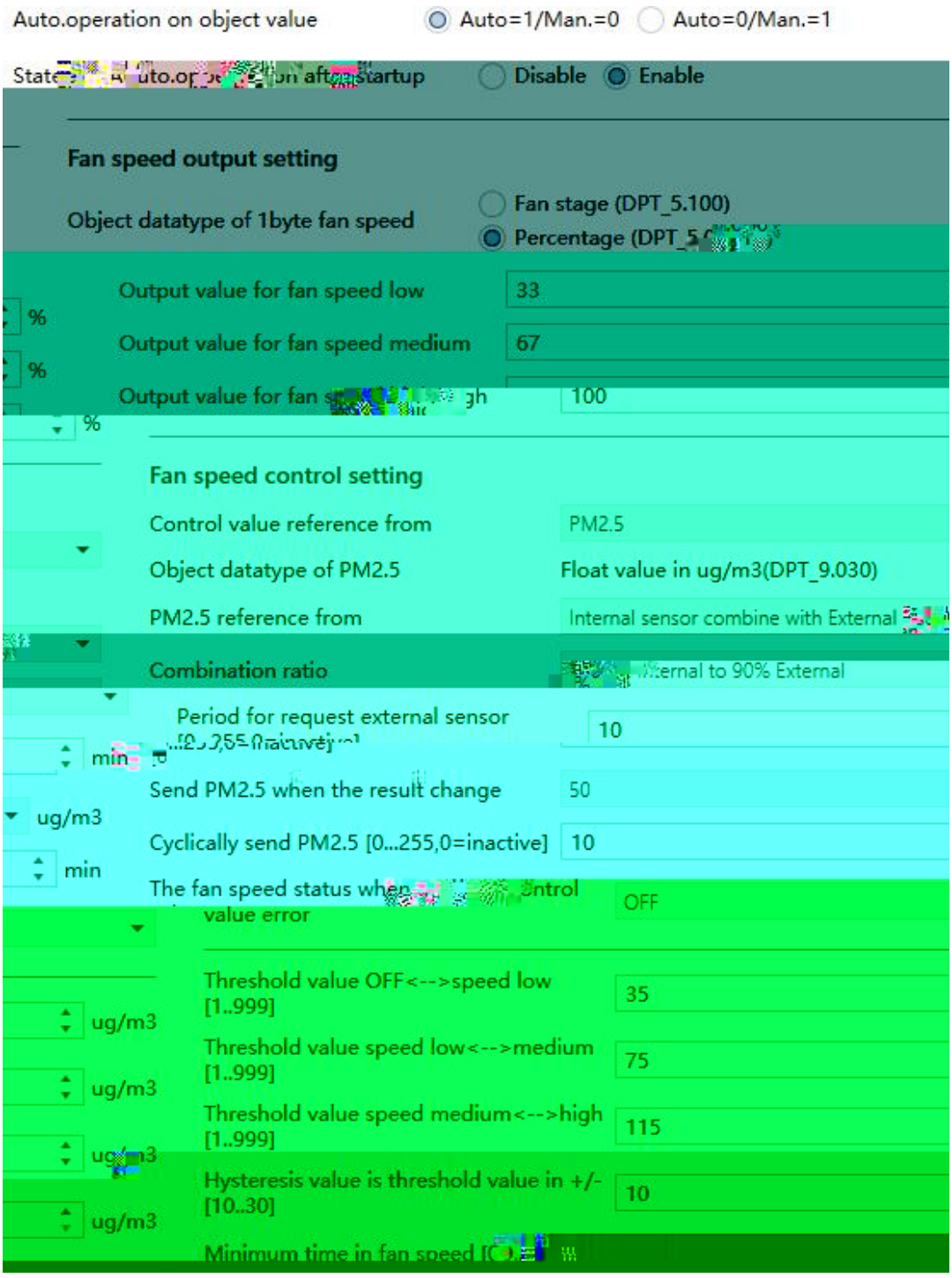
k 1bit k

k



, PM2.5 CO2 TVOC ,

5.10 k



5.10 “Ventilation controller”

Auto=1/Man.=0	“Fan automatic operation”	“1”	“0”
Auto=0/Man.=1	“Fan automatic operation”	“0”	“1”

1byte

k


“40% Internal to 60% External”
40%
t3
60%
+

k

k

k

k

□

□

□ □ □ □ □ □ □ □ □

k

k

k

0 k

k

“Logic function” 5.11 8 k



Description for logic function

Function of channel AND

5.11 “Logic function”

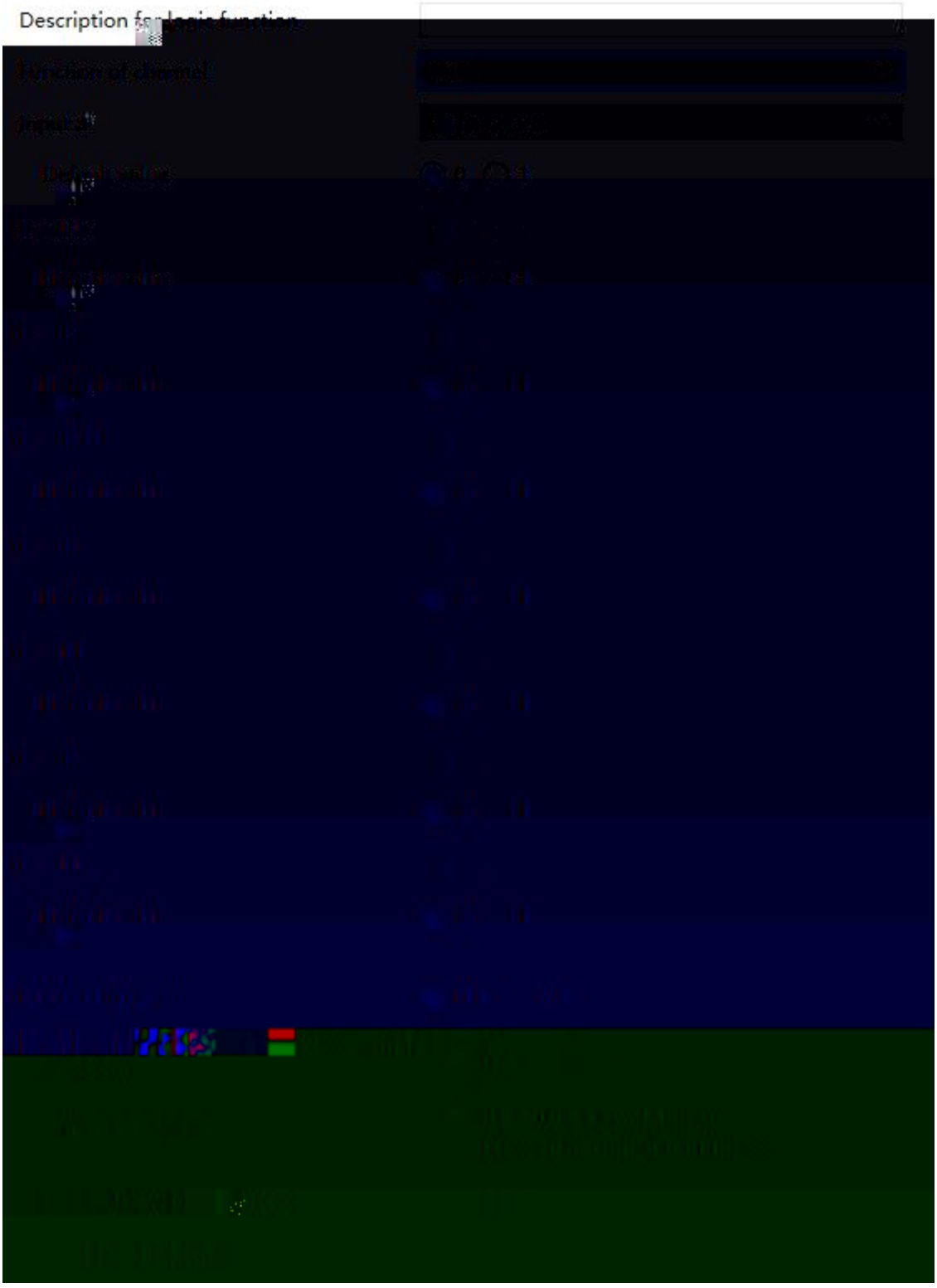
k 8 k

k 30 k

k

AND/OR/XOR

k



5.11.1 “Logic function_AND/OR/XOR

input x k

Disconnected

Normal

Inverted k

k

input x k

Receiving a new telegram k

Every change of output object k

k

k Base × Factor Base “None”

k

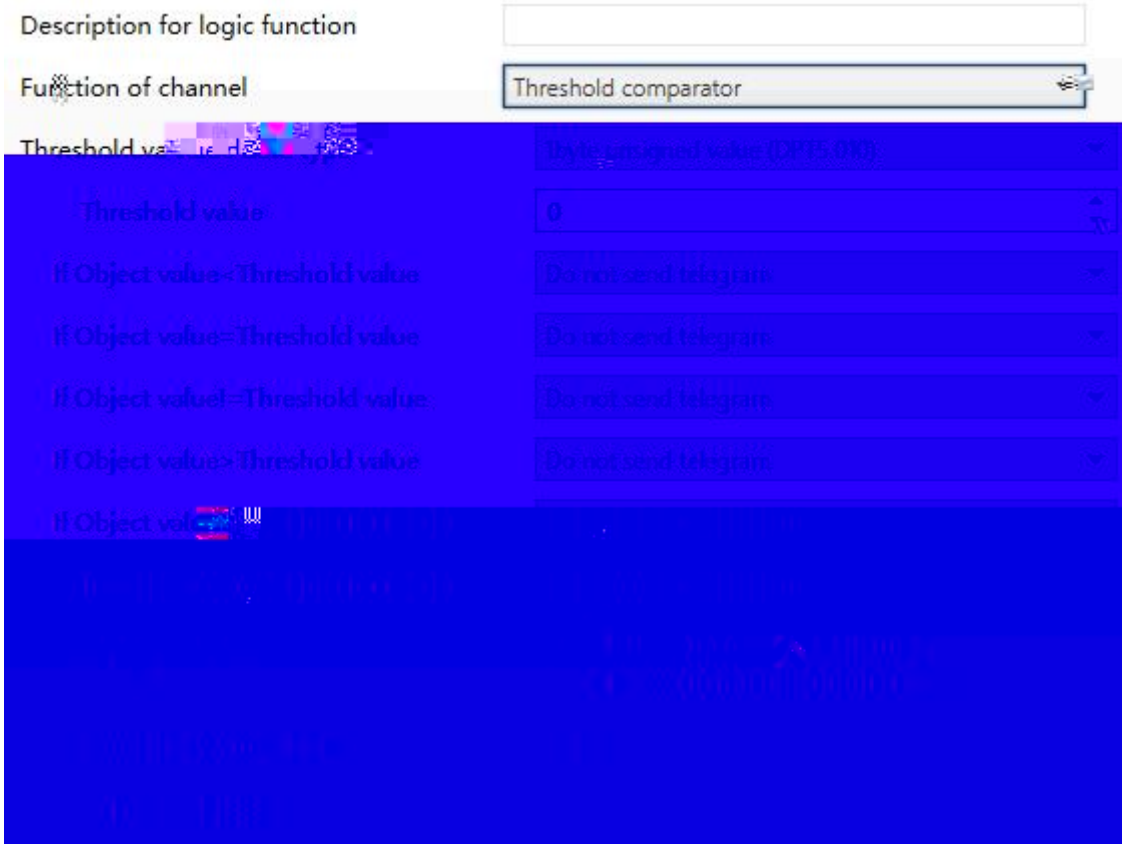
KNX/E

k 8 k

k

X (X=A/B/C/D) k

k k



5.11.3 “Logic function_Threshold comparator”

k

“2byte float value (DPT9.x)” ! “Illuminance value (DPT 9.004)”

k

k

! ! ! !

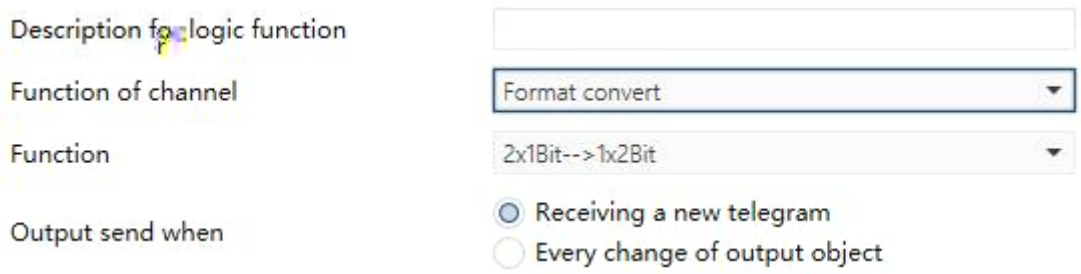
l k “2byte float value (DPT9.x)” ! “Illuminance value (DPT 9.004)”

k

Do not send telegram







5.11.4 “Logic function _Format convert”

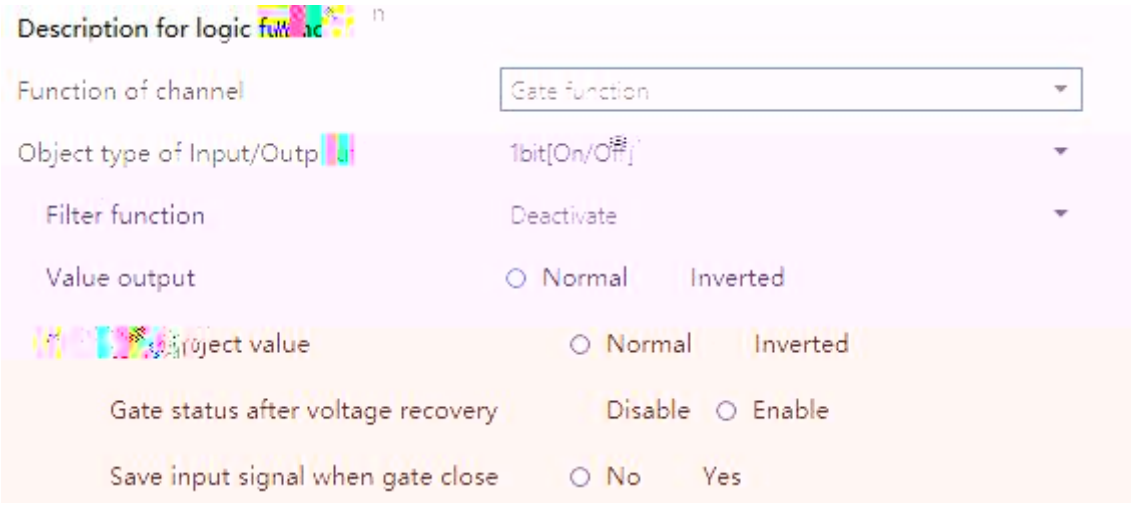
k

k

Receiving a new telegram k

Every change of output object k

k



5.11.5 “Gate function”

/ k

k

“1bit[On/Off]” k On Off

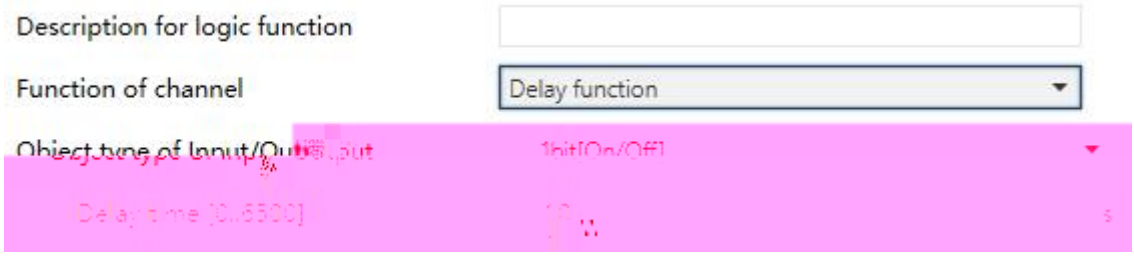
k

Deactivate On Off

On filter out Oi]t N

Off filter out

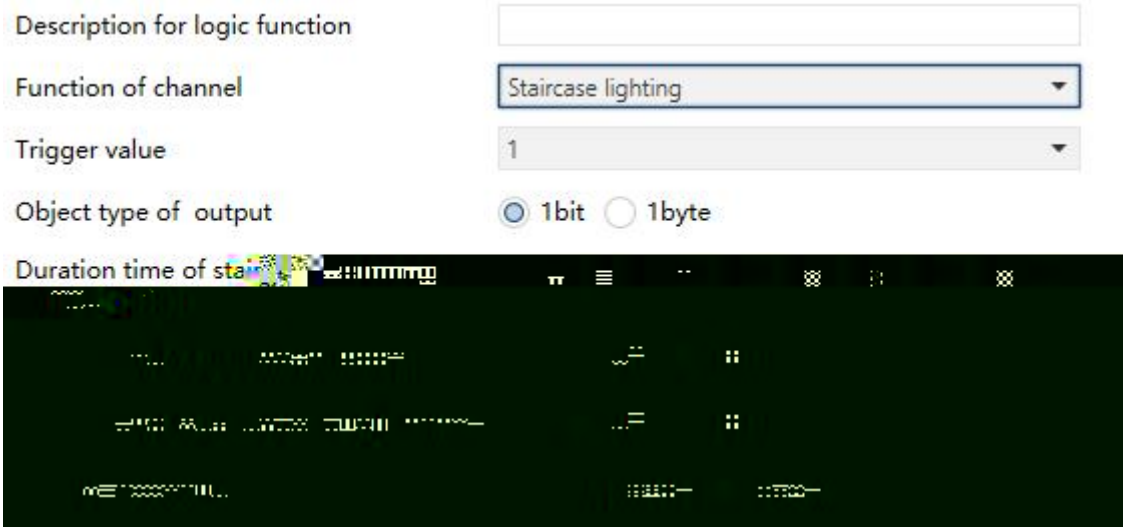
“1bit[On/Off]”



5.11.6 “Delay function”

/ k

k



5.11.7 “Staircase lighting”

“Trigger value” k

k

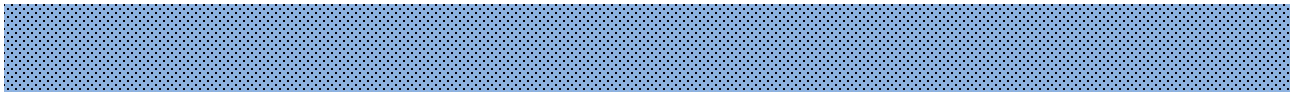
k

k 1 2 k

k

1bit

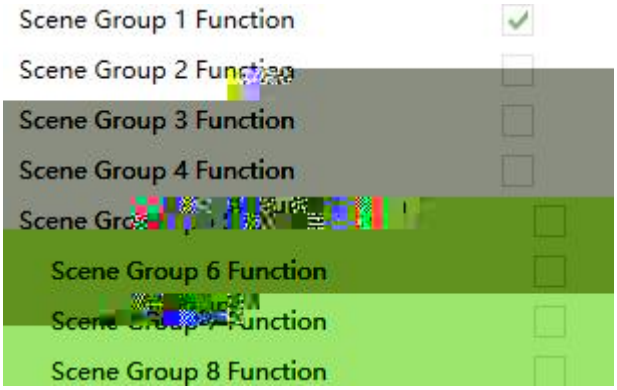
1byte



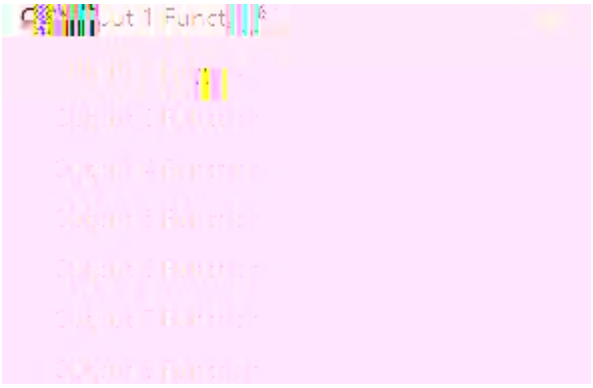
k

“Scene Group function” 8

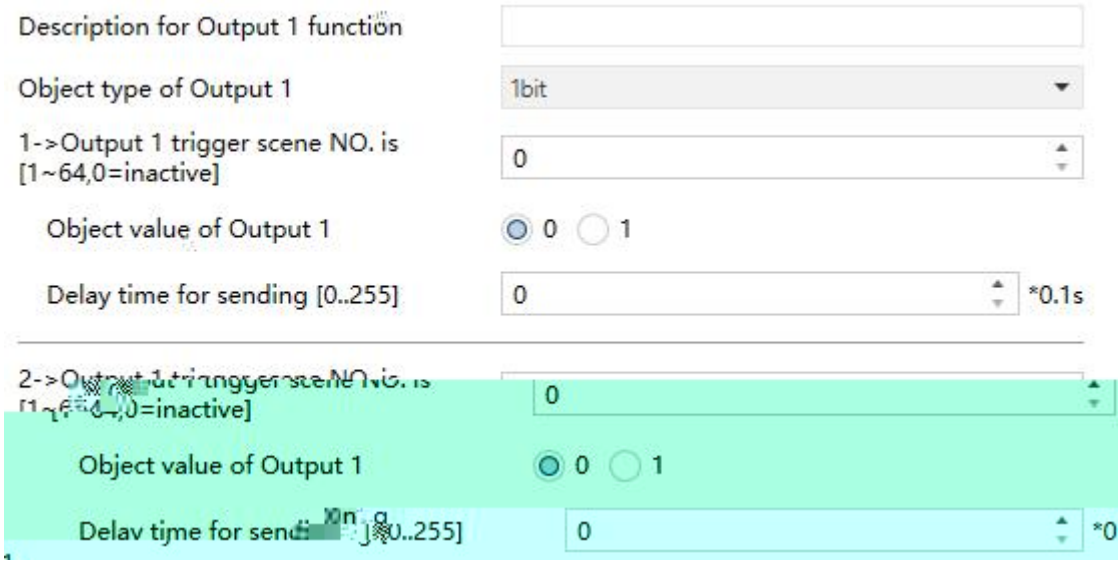
8 k k



5.12(1) “Scene Group function”



5.12(2) “Group X”



5.12(3) “Output Y function”

x 8 k

x y 8 k

8 8

x y k 30 k

x y k

1byte 2byte k

1byte

2byte

x y k 8 k

k

y k

1bit

1byte-1byte unsigned value

1byte-HVAC mode

2byte-2byte unsigned value

2byte-Temperature value

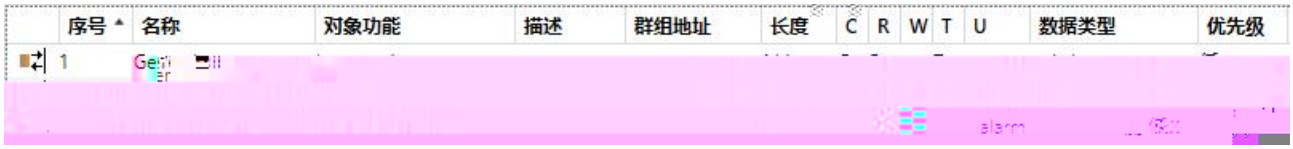
RGB RGB k

RGBW k

k :

k

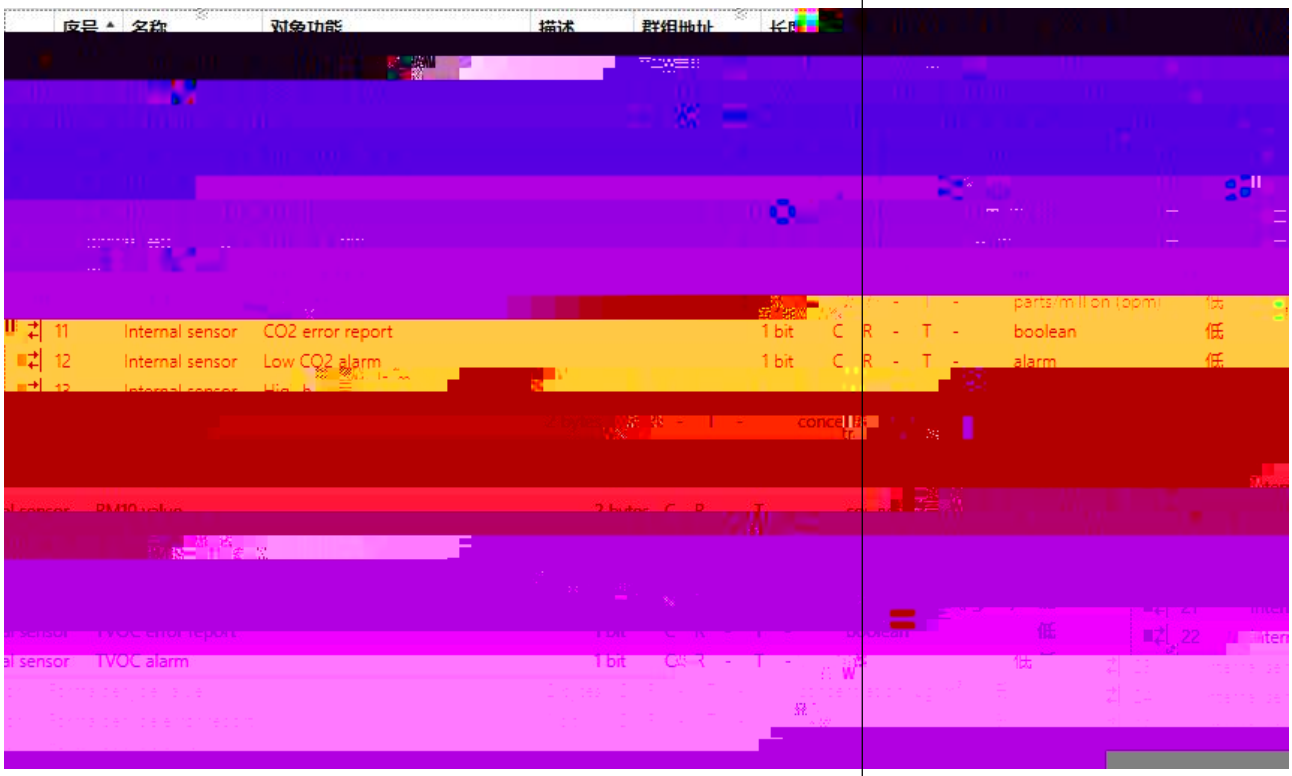
k



6.1 “General”

1 k					
/ k 0 ˚ ˚ 1 ˚ ˚					
1bit LED k 0 ˚ ˚ 1 ˚ ˚					

6.1 “General”



6.2 “Internal sensor measurement”

		k		
			k	
			k	
				k
				k
	Z			

k

1 ˚ 0 ˚					
PM10		PM10			k
	TVOC	TVOC	k		k
TVOC k 1 ˚ 0 ˚					
TVOC		TVOC			k
			k		k
k 1 ˚ 0 ˚					
k					

6.2 “Internal sensor measurement”



6.3.1 “AQI Level”

1~6 k

1bit

166 ˚ 1

167 ˚ 2

168 ˚ 3

169 ˚ 4

170 ˚ 5

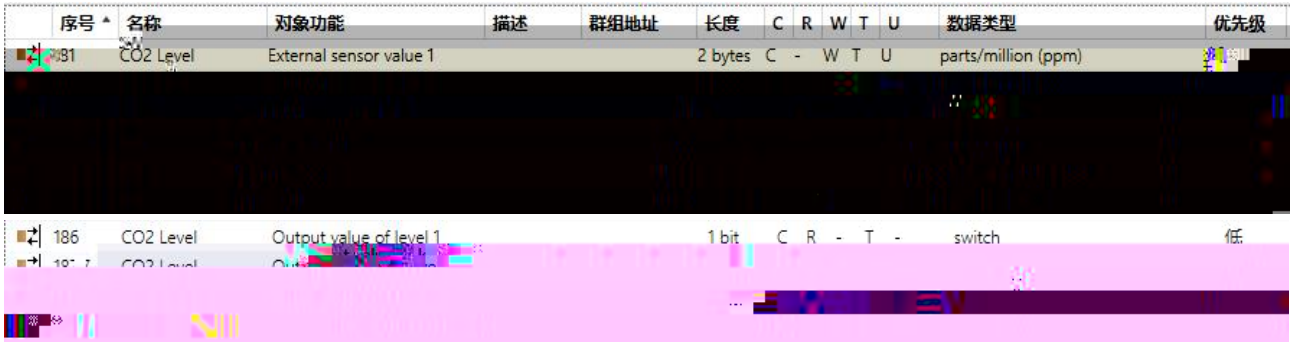
171 ˚ 6

k

1byte k 166

k

6.3.1 “AQI Level”



序号	名称	对象功能	描述	群组地址	长度	C	R	W	T	U	数据类型	优先级
181	CO2 Level	External sensor value 1			2 bytes	C	-	W	T	U	parts/million (ppm)	
186	CO2 Level	Output value of level 1			1 bit	C	R	-	T	-	switch	低

6.3.2 “CO2 Level”

1bit

186 ˚ 1

187 ˚ 2

188 ˚ 3

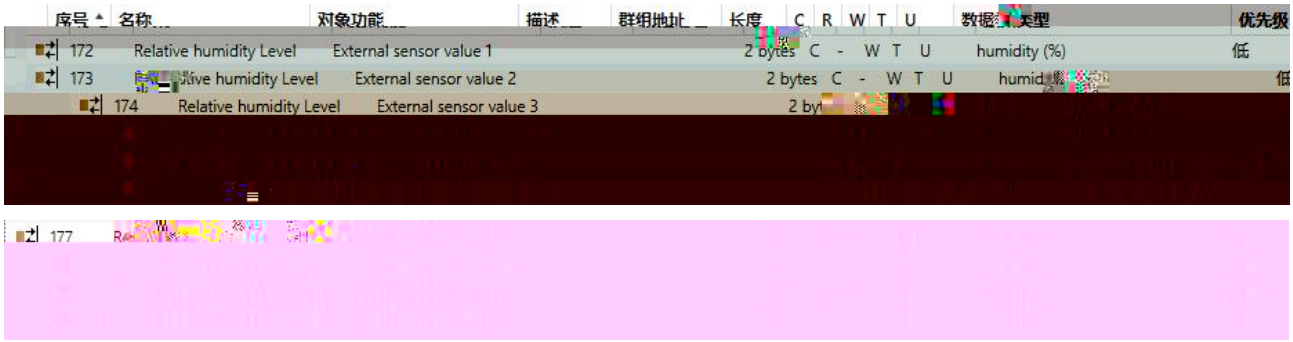
189 ˚ 4

k

1byte k 186

k

6.3.2 “CO2 Level”



6.3.3 “Relative humidity Level”

1~4 k

1bit

177 1

178 2

179 3

180 4

k

1byte k 180

k

6.3.3 “Relative humidity Level”



序号	名称	对象功能	描述	群组地址	长度	C	R	W	T	U	数据类型	优先级
190	PM2.5 Level	External sensor value 1			2 bytes	C	-	W	T	U	concentration (µg/m³)	低
191	PM2.5 Level	External sensor value 2			2 bytes	C	-	W	T	U	concentration (µg/m³)	低
192	PM2.5 Level	External sensor value 3			2 bytes	C	-	W	T	U	concentration (µg/	低
193	PM2.5 Level	Actual sensor value			2 bytes	C	R	-	T	-	concentration (µg/m³)	低
194	PM2.5 Level	Alarm message			14 bytes	C			T		Character String (ISO 8859-1)	低
195	PM2.5 Level	Output value of level			1 bit	C	R	-	T	-	switch	低
196	PM2.5 Level	Output value of level 2			1 bit	C	R	-	T	-	switch	低
197	PM2.5 Level	Outpu										

6.3.4 “PM2.5 Level”

PM2.5 k 0 k					
PM2.5 k					
1byte 3byte k					k

1~6 k

1bit

195 ˚ 1

196 ˚ 2

197 ˚ 3

198 ˚ 4

199 ˚ 5

200 ˚ 6

k

1byte k 195

k

6.3.4 “PM2.5 Level”



应号	名称	对象功能	描述	群组地址	长度	C	R	W	T	U	数	优先级
201	PM10 Level	External sensor value 1			2 bytes	C	-	W	T	U	concentration (µg/m³)	低
202	PM10 Level	External sensor value 2			2 bytes	C	-	W	T	U	concentration (µg/m³)	低
203	PM10 Level	External sensor value 3			2 bytes	C	-	W	T	U	concentration (µg/m³)	低
204	PM10 Level	Actual sensor value			2 bytes	C	R	-	T	-		
206	PM10 Level	Output value of level 1			1 bit	C	R	-	T	-	switch	低
207	PM10 Level	Output value of level 2			1 bit	C	R	-	T	-	switch	低

6.3.5 “PM10 Level”

PM10 k

0

1~4 k

1bit

206 ˚ 1

207 ˚ 2

208 ˚ 3

209 ˚ 4

k

1byte k 206

k

6.3.5 “PM10 Level”



6.3.6 “TVOC Level”

TVOC k

0 k k

TVOC k k

1byte 3byte k k

1~4 k

1bit

215 ˚ 1

216 ˚ 2

217 ˚ 3

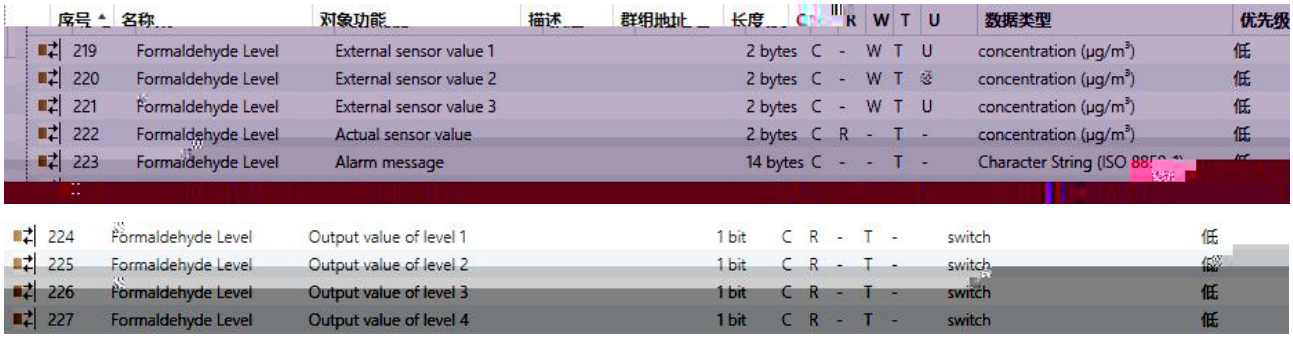
218 ˚ 4

k

1byte k 215

k

6.3.6 “TVOC Level”



序号	名称	对象功能	描述	群组地址	长度	C	R	W	T	U	数据类型	优先级
219	Formaldehyde Level	External sensor value 1			2 bytes	C	-	W	T	U	concentration (µg/m³)	低
220	Formaldehyde Level	External sensor value 2			2 bytes	C	-	W	T	U	concentration (µg/m³)	低
221	Formaldehyde Level	External sensor value 3			2 bytes	C	-	W	T	U	concentration (µg/m³)	低
222	Formaldehyde Level	Actual sensor value			2 bytes	C	R	-	T	-	concentration (µg/m³)	低
223	Formaldehyde Level	Alarm message			14 bytes	C	-	-	T	-	Character String (ISO 8859-1)	低
224	Formaldehyde Level	Output value of level 1			1 bit	C	R	-	T	-	switch	低
225	Formaldehyde Level	Output value of level 2			1 bit	C	R	-	T	-	switch	低
226	Formaldehyde Level	Output value of level 3			1 bit	C	R	-	T	-	switch	低
227	Formaldehyde Level	Output value of level 4			1 bit	C	R	-	T	-	switch	低

6.3.7 “Formaldehyde Level”

k

0 k k

k k

1byte 3byte k □ □ □ □ □ □ □

1~4 k

1bit

224 ˚ 1

225 ˚ 2

226 ˚ 3

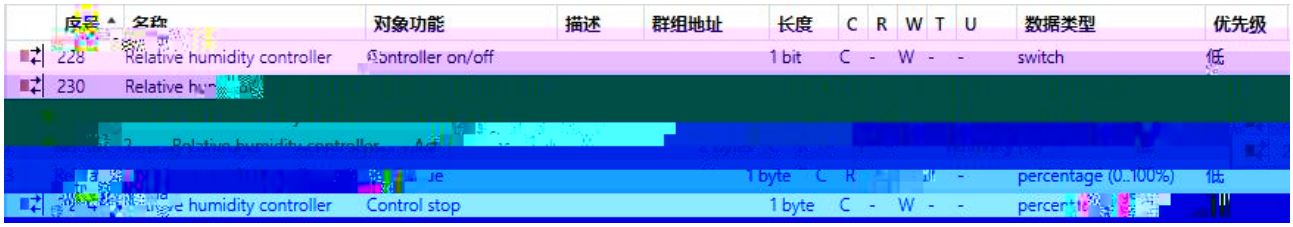
227 ˚ 4

k

1byte k 224

k

6.3.7 “Formaldehyde Level”



6.4.1 “Relative humidity controller”

k

k

OFF

k

6.4.1 “Relative humidity controller”

KNX

		k			OFF
	k				

6.422

k No telegram k k					
k No telegram k k					
k k k					
k k k					
k k					

! k C,W,U C,W k OFF k ON k					
! k k					
! k k					
! k k					
! k k k					
! k k					
k k k					



6.6 “Light control”

3 0 k

k

2 k k

k

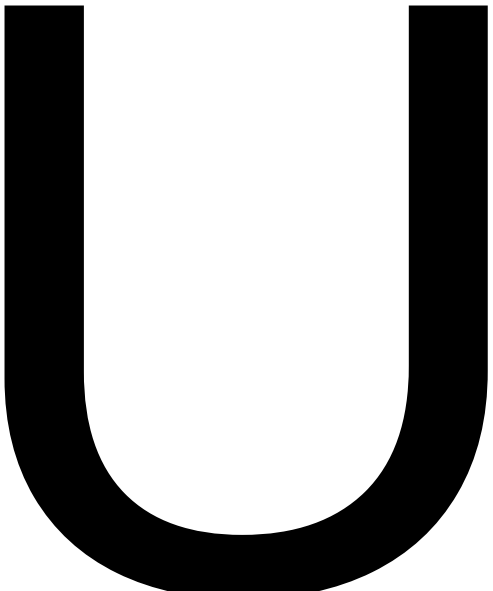
k

k k

k k

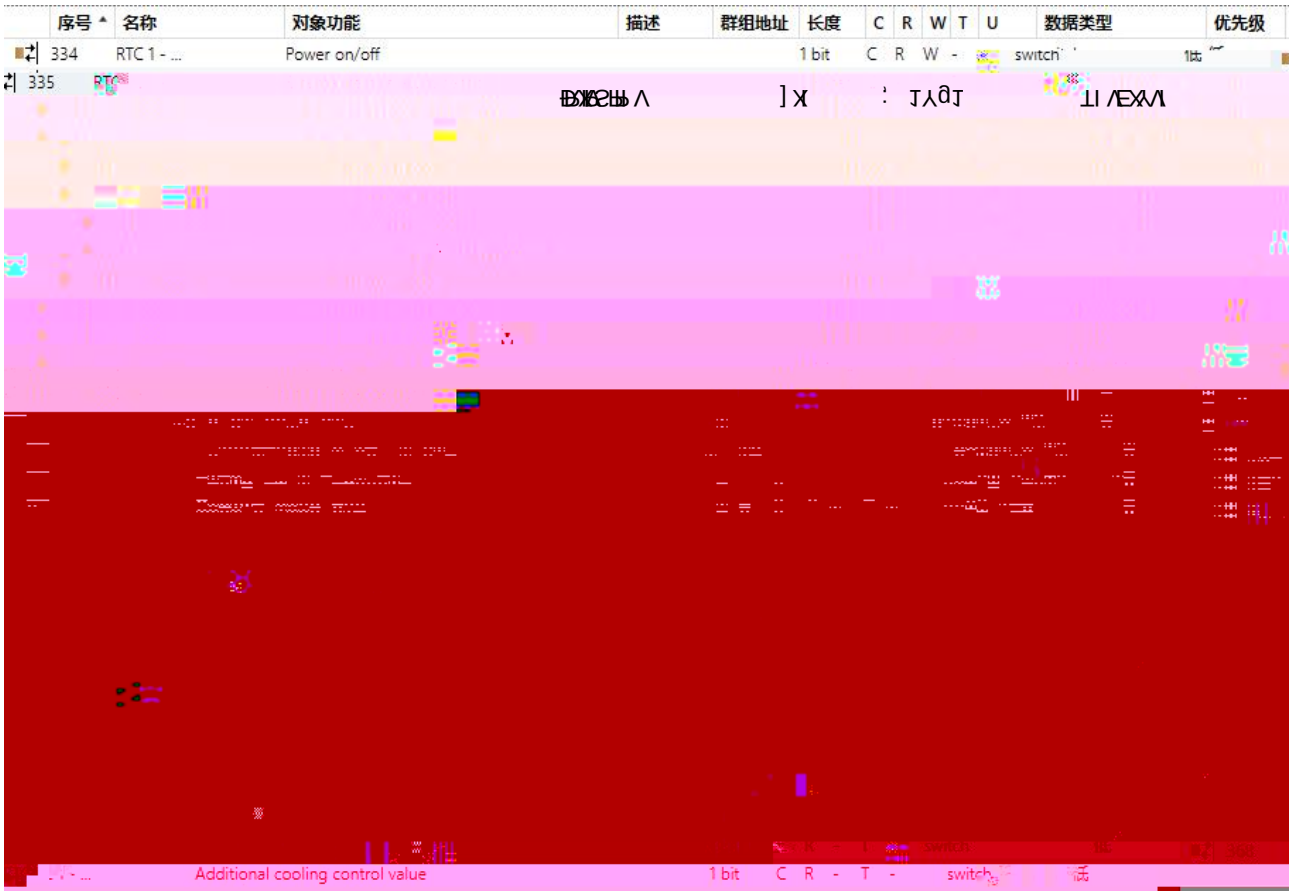
k k

k

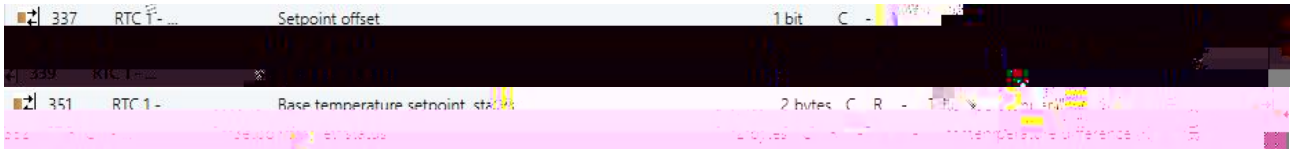


k k k					
k					
k					
4 k k					
k k					OFF

6.7 “Constant lighting”



Absolute



Relative

6.8 “RTC function”

k

1——

0——

k

1byte 341

0 ˚

k k

k k

= 150 +

k k

k

k

k

1byte 355 1- 2- 3- 4- k

1bit

356 ˚

357 ˚

358 ˚

359 ˚

“1” k 1bit !

0 k 1bit 1 k

1bit	1	0
1byte	100%	0% k

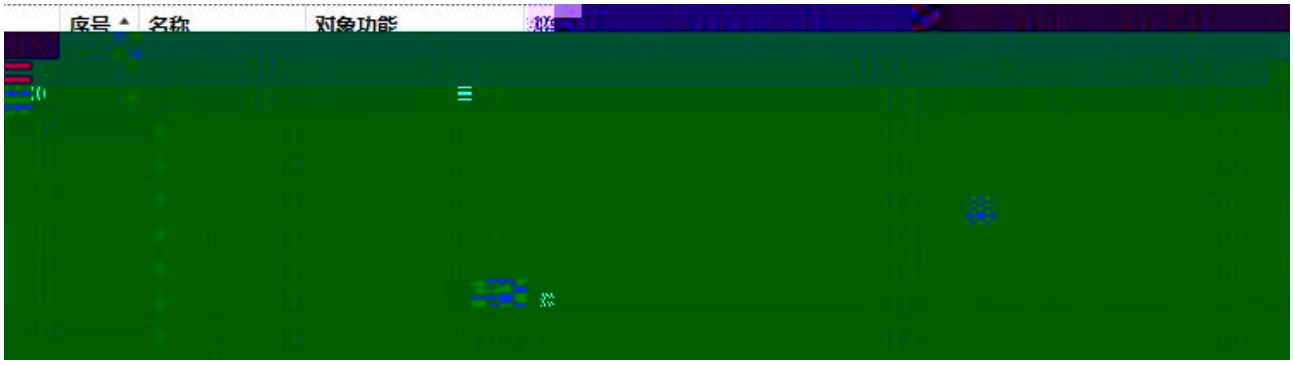
6.8 “RTC function”



6.9 “Ventilation controller”

k 1 ˚ 0 ˚					
k PM2.5/VOC/CO2 k ug/m3 ppm k 0~999ug/m3 0~4000ppm PM2.5 PM2.5 k					
1byte k k					
k PM2.5/TVOC/CO2 k					

6.9“Ventilation controller”



6.10.1 “AND/OR/XOR”

Input x k “Description for logic function” “1st Logic” k k					
k					

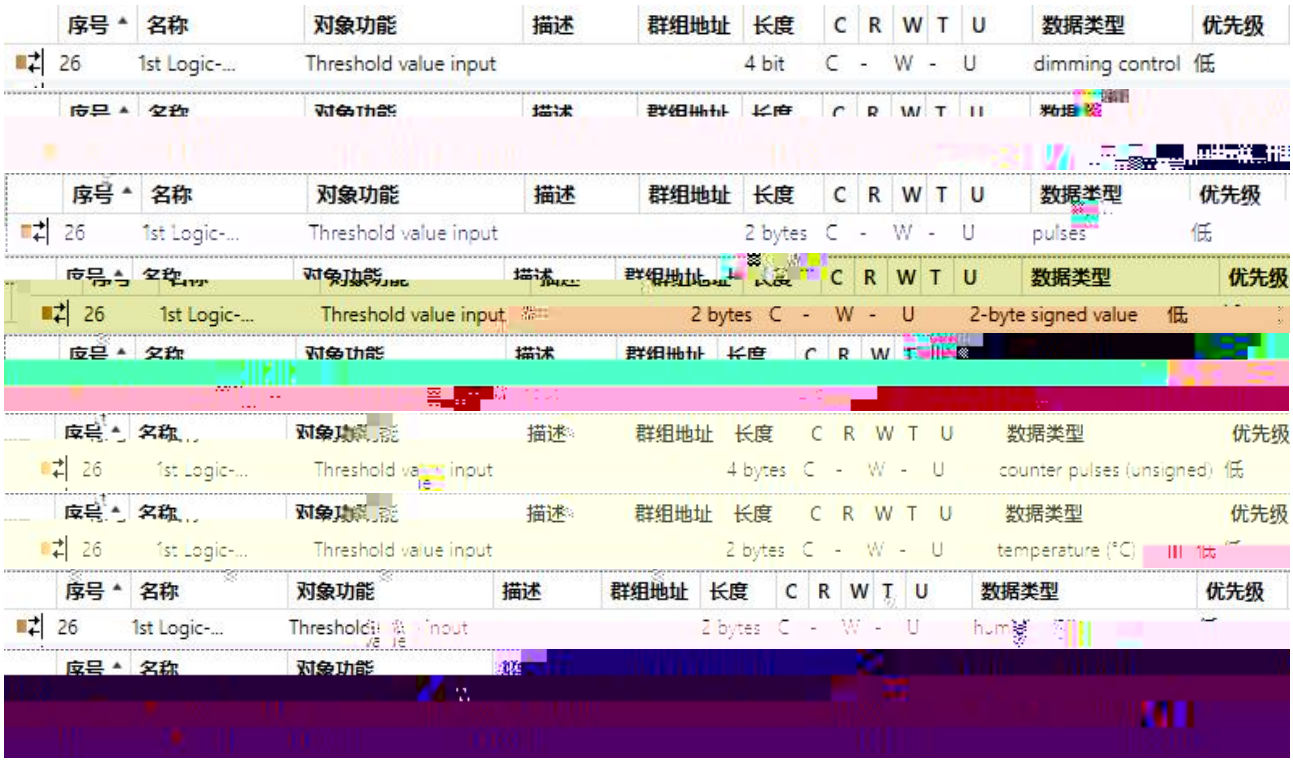
6.10.1 “AND/OR/XOR”



6.10.2 “Gate forwarding”

k					
Input x k					
k k					

6.10.2 “Gate forwarding”



序号	名称	对象功能	描述	群组地址	长度	C	R	W	T	U	数据类型	优先级
26	1st Logic-...	Threshold value input			4 bit	C	-	W	-	U	dimming control	低
26	1st Logic-...	Threshold value input			2 bytes	C	-	W	-	U	pulses	低
26	1st Logic-...	Threshold value input			2 bytes	C	-	W	-	U	2-byte signed value	低
26	1st Logic-...	Threshold value input			4 bytes	C	-	W	-	U	counter pulses (unsigned)	低
26	1st Logic-...	Threshold value input			2 bytes	C	-	W	-	U	temperature (°C)	低
26	1st Logic-...	Threshold value input			2 bytes	C	-	W	-	U	hum	低

6.10.3 “Threshold comparator”



“2x1bit --> 1x2bit” 2 1bit 2bit Input bit1=1, bit0=0--> Output 2bit=2



“8x1bit --> 1x1byte” : 8 1bit 1byte Input bit2=1, bit1=1, bit0=1, 0--> Output 1byte=7



“1x1byte --> 1x2byte” 1byte 2byte Input 1byte=125--> Output 2byte=125,



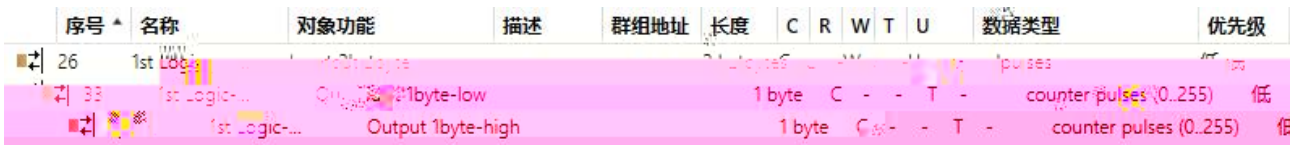
“2x1byte --> 1x2byte” 2 1byte 2byte Input 1byte-low = 255 ($FF), Input 1byte-high = 100 ($64) --> Output 2byte = 25855 ($64 FF)



“2x2byte --> 1x4byte” 2 2byte 4byte Input 2byte-low = 65530 ($FF FA), Input 2byte-high = 32768 ($80 00)--> Output 2byte = 2147549178 ($80 00 FF FA)



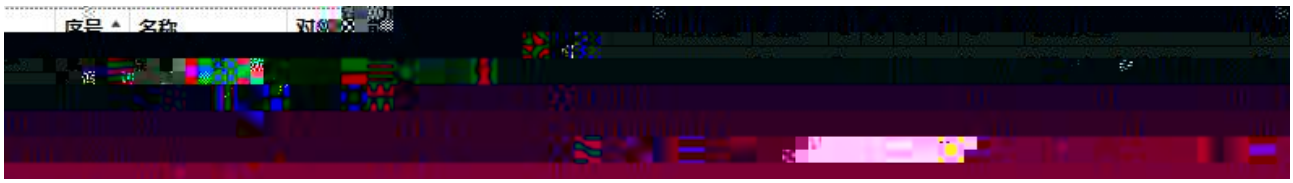
“1x1byte --> 8x1bit” 1 1byte 8 1bit Input 1byte=200 --> Output bit0=0, bit1=0, bit2=0, bit3=1, bit4=0, bit5=0, bit6=1, bit7=1



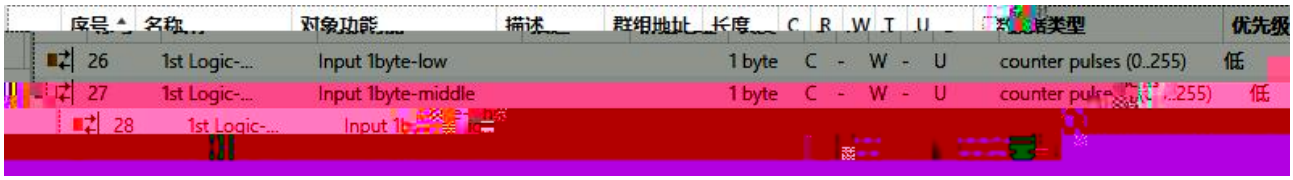
“1x2byte --> 2x1byte” 1 2byte 2 1byte Input 2byte = 55500 ($D8 CC) --> Output 1byte-low = 204 ($CC), Output 1byte-high =216 ($D8)



“1x4byte --> 2x2byte” 1 4byte 2 2byte Input 4byte = 78009500 ($04 A6 54 9C) --> Output 2byte-low = 21660 ($54 9C), Output 2byte-high =1190 ($04 A6)



“1x3byte --> 3x1byte” 1 3byte 3 1byte Input 3byte = $78 64 C8--> Output 1byte-low = 200 ($C8) , Output 1byte-middle = 100 ($64) , Output 1byte-high =120 ($78)

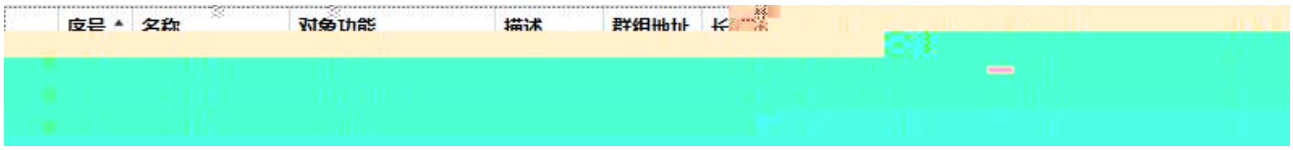


“3x1byte --> 1x3byte” 3 1byte 1 3byte Input 1byte-low = 150 ($96), Input 1byte-middle = 100 ($64), Input 1byte-high = 50 ($32)--> Output 3byte = $32 64 96

6.7.4 “Format convert”

k					
k					

6.10.4 “Format convert”



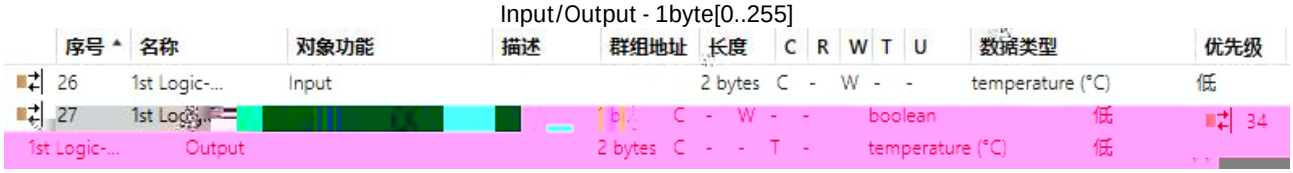
Input/Output - 1bit[On/Off]



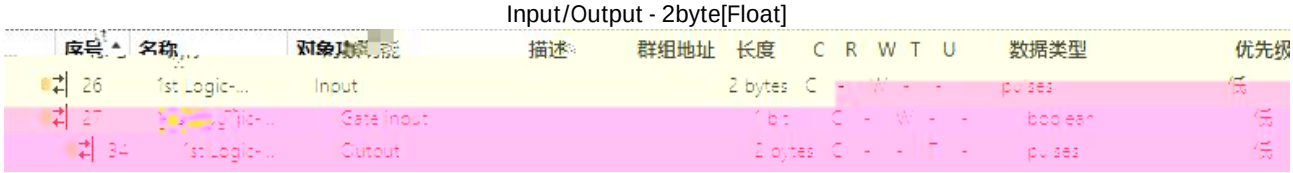
Input/Output - 1byte[0..100%]



Input/Output - 1byte[0..255]



Input/Output - 2byte[Float]

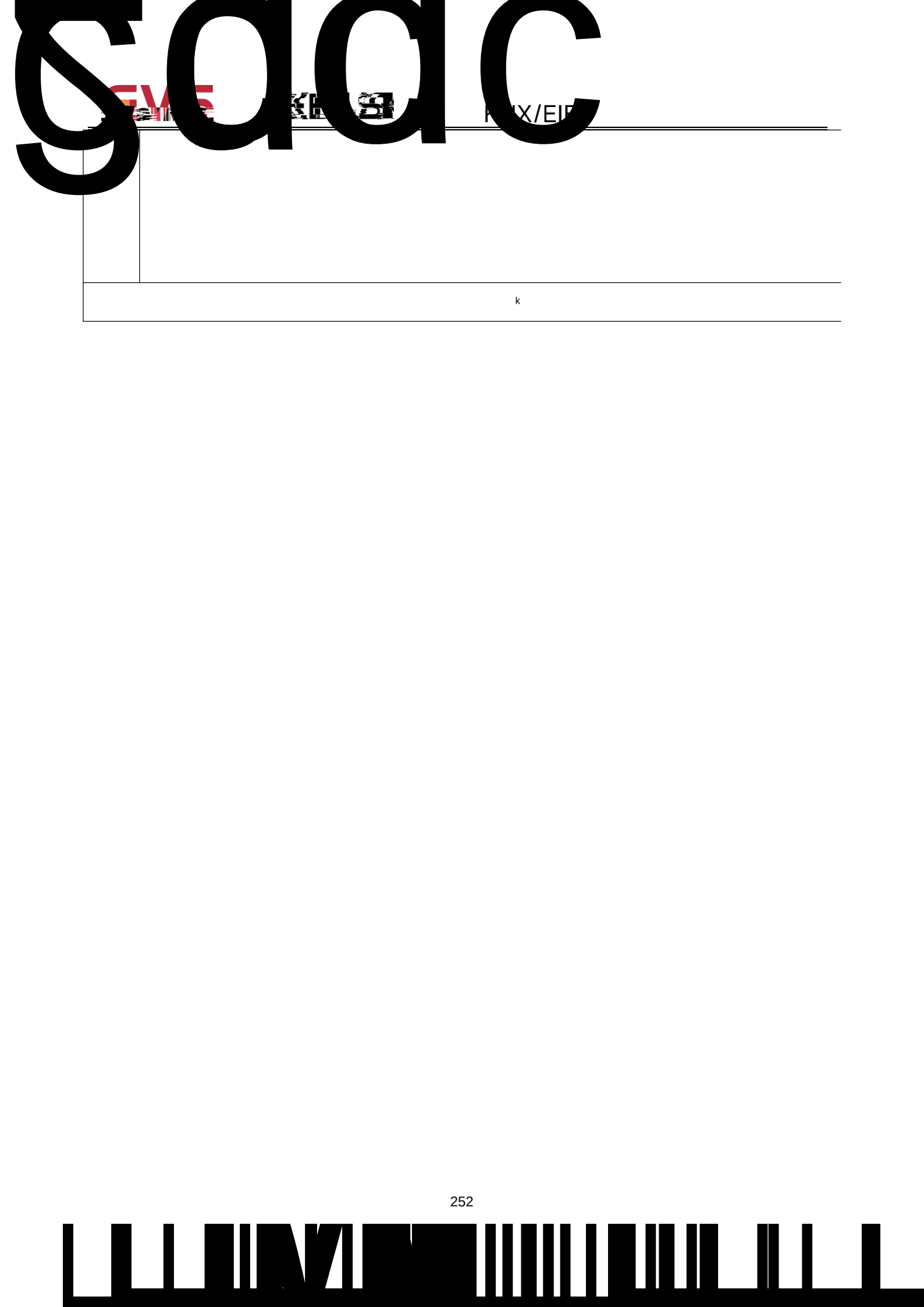


Input/Output - 2byte[0..65535]

6.10.5 “Gate function”

k					
k k					

K


k



6.11 “Scene Group”

					k 0..63
					k k 8 8 k “Description for Output x function” “1st Scene Group-Output x” k

6.11 “Scene Group”