

ADVANTECH

Enabling an Intelligent Planet



BOSCH
Security Systems

(Verification EKI7710G2CPA1801-T FW 1.01.10)

version 19-07-2023

Version 1.9

Jul 19, 2023

Specifications

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2. Revision History

Revision	Date	Description	By
1.0	July 18, 2023	First Release	Mahmod Gebah

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3. Preparation:

3.1 Installing firmware on both partitions

The first firmware version for Bosch is version 1.01.05. This is based on version 1.01.04 used for the standard EKI-7710G-2CI. Version 1.01.7 was skipped as web server was disabled.

NOTE:

For firmware versions is no difference between the EKI-7710G-2C(I) or EKI-7710G-2CP(I).

Be noticed that this is updated version with date 18-07-2023 (build version D120626S06511)

```
Model name       : EKI-7710G-2C
MAC address      : 00:0B:AB:ED:95:F7
IP address       : 169.254.255.1
Firmware version : 1.01.10
Firmware date    : Jun 26 2023 - 10:09:55
Loader version   : 1.01.S05012
Loader date      : Apr 09 2021 - 10:21:33
Active partition : image0
BoardID          : 6
ModelID          : 7713
BoardModelName   : 7710G_2C
Test mode        : 0
POE mode         : NON_POE
ImageModifyDate0 : 2023-06-26 10:09:55
ImageSize0       : 11829136
ImageModifyDate1 : 2023-06-26 10:09:55
ImageSize1       : 11829136
```

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Device Information	
Information Name	Information Value
System Name	Switch
System Location	Default
System Contact	Default
MAC Address	00:0B:AB:ED:95:F7
IP Address	169.254.255.1
Subnet Mask	255.255.0.0
Gateway	0.0.0.0
Loader Version	1.01.S05012
Loader Date	Apr 09 2021 - 10:21:33
Firmware Version	1.01.10
Firmware Date	Jun 26 2023 - 10:09:55
Build Version	D120626S06511
System OID	1.3.6.1.4.1.10297.202.7000
System Up Time	0 days, 0 hours, 4 mins, 36 secs

Images Information 0	
Synchronized_Image	Active
Flash Partition	0
Image Name	Synchronized_Image
Image Version	1.01.10
Image Size	11829136 Bytes
Created Time	2023-06-26 10:09:55 UTC

Images Information 1	
Synchronized_Image	Backup
Flash Partition	1
Image Name	Synchronized_Image
Image Version	1.01.10
Image Size	11829136 Bytes
Created Time	2023-06-26 10:09:55 UTC

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NOTE:

After installation the firmware on both partitions, you need to Reset the switch, via pressing the reset button in front for 5 seconds) to load all the firmware defaults!

3.2 QoS

QoS Basic Mode

Switch / QoS / General / QoS Properties

QoS Properties

QoS Mode ☐ Disabled ☒ Basic

Apply

QoS Global Information

Information Name	Information Value
QoS Mode	Basic

QoS Trust mode to DSCP

Switch / QoS / QoS Basic Mode / Global Settings

Basic Mode Global Settings

Trust Mode

Apply

Basic Mode Global Information

Information Name	Information Value
Trust Mode	DSCP

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Trunk Port 1 thru Trunk Port 8

Disable Remark CoS, Remark DSCP and Remark IP Precedence

QoS Status				
Port	CoS Value	Remark CoS	Remark DSCP	Remark IP Precedence
GE1	0	Disabled	Disabled	Disabled
GE2	0	Disabled	Disabled	Disabled
GE3	0	Disabled	Disabled	Disabled
GE4	0	Disabled	Disabled	Disabled
GE5	0	Disabled	Disabled	Disabled
GE6	0	Disabled	Disabled	Disabled
GE7	0	Disabled	Disabled	Disabled
GE8	0	Disabled	Disabled	Disabled
GE9	0	Disabled	Disabled	Disabled
GE10	0	Disabled	Disabled	Disabled
Trunk1	0	Disabled	Disabled	Disabled
Trunk2	0	Disabled	Disabled	Disabled
Trunk3	0	Disabled	Disabled	Disabled
Trunk4	0	Disabled	Disabled	Disabled
Trunk5	0	Disabled	Disabled	Disabled
Trunk6	0	Disabled	Disabled	Disabled
Trunk7	0	Disabled	Disabled	Disabled
Trunk8	0	Disabled	Disabled	Disabled

4. Default configuration:

4.1 DSCP queuing

DSCP queuing	strict	To make sure highest priority always goes first.
--------------	--------	--

Queue Table

Queue	Strict	WRR	Weight	% of WRR Bandwidth
1	<input checked="" type="radio"/>	<input type="radio"/>	<input type="text" value="1"/>	
2	<input checked="" type="radio"/>	<input type="radio"/>	<input type="text" value="2"/>	
3	<input checked="" type="radio"/>	<input type="radio"/>	<input type="text" value="3"/>	
4	<input checked="" type="radio"/>	<input type="radio"/>	<input type="text" value="4"/>	
5	<input checked="" type="radio"/>	<input type="radio"/>	<input type="text" value="5"/>	
6	<input checked="" type="radio"/>	<input type="radio"/>	<input type="text" value="9"/>	
7	<input checked="" type="radio"/>	<input type="radio"/>	<input type="text" value="13"/>	
8	<input checked="" type="radio"/>	<input type="radio"/>	<input type="text" value="15"/>	

Apply

4.2 DSCP highest prio queue

DSCP highest prio queue	56-63	For all 10 ports, used for PTP sync + PTP delay request.
-------------------------	-------	--

DSCP Mapping Information

DSCP	Mapping to Queue
56	8
57	8
58	8
59	8
60	8
61	8
62	8
63	8

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4.3 DSCP highest-1 prio queue

DSCP highest-1 prio queue	46-55	For all 10 ports, used for PTP follow-up, delay response, Audio
---------------------------	-------	---

DSCP Mapping Information	
DSCP	Mapping to Queue
46	7
47	7
48	7
49	7
50	7
51	7
52	7
53	7
54	7
55	7

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4.4 DSCP highest-2 prio queue

DSCP highest-2 prio queue	8-45	For all 10 ports, Reserved for future use
---------------------------	------	---

DSCP Mapping Information	
DSCP	Mapping to Queue
8	6
9	6
10	6
11	6
12	6
13	6
14	6
15	6
16	6
17	6
18	6
19	6
20	6
21	6
22	6
23	6
24	6
25	6

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DSCP Mapping Information	
DSCP	Mapping to Queue
26	6
27	6
28	6
29	6
30	6
31	6
32	6
33	6
34	6
35	6
36	6
37	6
38	6
39	6
40	6
41	6
42	6
43	6
44	6
45	6

4.5 DSCP value other queues

DSCP value other queues	0-7	For all 10 ports, used for Best effort traffic
-------------------------	-----	--

DSCP Mapping Information	
DSCP	Mapping to Queue
0	1
1	5
2	5
3	5
4	5
5	5
6	5
7	5

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4.6 RSTP hello time

RSTP hello time	9s	Normal default is 3s Increase is needed to allow reboot of the device without triggering a re-converge
-----------------	----	--

STP Bridge Information	
Information Name	Information Value
Priority	53248
Forward Delay	30
Max Age	22
Tx Hold Count	6
Hello Time	9

4.7 RSTP forward delay

RSTP forward delay	30s	Related to max age.
--------------------	-----	---------------------

STP Bridge Information	
Information Name	Information Value
Priority	53248
Forward Delay	30
Max Age	22
Tx Hold Count	6
Hello Time	9

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4.8 RSTP max age

RSTP max age	22	To allow a daisy chain of 22 devices, root included
--------------	----	---

STP Bridge Information	
Information Name	Information Value
Priority	53248
Forward Delay	30
Max Age	22
Tx Hold Count	6
Hello Time	9

4.9 RSTP

RSTP	Enabled	To avoid problems when system is immediately installed with a loop. Downside it takes 30s (forward delay) for ports which do not have RSTP supporting devices connected to start communicating.
------	---------	---

STP Information	
Information Name	Information Value
STP	Enabled
BPDU Forward	flooding
BPDU Guard	Disabled
PathCost Method	long
Force Version	RSTP-Operation

4.10 RSTP bridge priority

RSTP bridge priority	53248	To take priority over the MPS
----------------------	-------	-------------------------------

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STP Bridge Information	
Information Name	Information Value
Priority	53248
Forward Delay	30
Max Age	22
Tx Hold Count	6
Hello Time	9

4.11 P2PMAC

P2PMAC	Enabled	For all ports
--------	---------	---------------

STP Port Status				
Port	Admin Enable	Path Cost	Edge Port	P2P MAC
GE1	Enable	0	No	Yes
GE2	Enable	0	No	Yes
GE3	Enable	0	No	Yes
GE4	Enable	0	No	Yes
GE5	Enable	0	No	Yes
GE6	Enable	0	No	Yes
GE7	Enable	0	No	Yes
GE8	Enable	0	No	Yes
GE9	Enable	0	No	Yes
GE10	Enable	0	No	Yes
Trunk1	Enable	0	No	Yes
Trunk2	Enable	0	No	Yes
Trunk3	Enable	0	No	Yes
Trunk4	Enable	0	No	Yes
Trunk5	Enable	0	No	Yes
Trunk6	Enable	0	No	Yes
Trunk7	Enable	0	No	Yes
Trunk8	Enable	0	No	Yes

4.12 X-Ring, Pro + Elite

X-Ring, Pro + Elite	Disabled	To avoid interference with RSTP
---------------------	----------	---------------------------------

Information	
Information Name	Information Value
X-Ring Pro State	Disabled

Information	
Information Name	Information Value
X-Ring Elite State	Disabled

4.13 DHCP server

DHCP server	Disabled	To avoid it runs in to performance issues when servicing 150+ devices requesting simultaneously
-------------	----------	---

Status Information	
Information Name	Information Value
DHCP Server Service	Disabled

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4.14 Telnet

Telnet	Disabled	For security
--------	----------	--------------

Telnet Information	
Information Name	Information Value
Telnet Service	Disabled
Current Telnet Sessions Count	0

4.15 SSH

SSH	Disabled	For security
-----	----------	--------------

SSH Information	
Information Name	Information Value
SSH	Disabled

4.16 Webserver

Webserver	Enabled	To upload new firmware and change settings if needed
-----------	---------	--

4.17 https

https	Enabled	To encrypt password exchange
-------	---------	------------------------------

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NOTE:

Only access via HTTPS connection is possible.

HTTPS Information	
Information Name	Information Value
HTTPS Service	Enabled
Session Timeout	30



Zertifikats-Viewer: My Name

Allgemein
Details

Ausgestellt für

Allgemeiner Name (CN) My Name
Organisation (O) <Gehört nicht zum Zertifikat>
Organisationseinheit (OU) My Organization

Ausgestellt von

Allgemeiner Name (CN) My Name
Organisation (O) <Gehört nicht zum Zertifikat>
Organisationseinheit (OU) My Organization

Gültigkeitsdauer

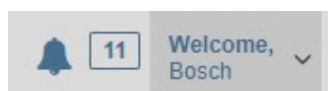
Ausgestellt am Sonntag, 25. Juni 2023 um 19:04:54
Gültig bis Samstag, 20. Juni 2043 um 19:04:54

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4.18 User Bosch

User Bosch	Create	Create admin level user account Bosch, with password mLqAMhQ0GU5NGUK
------------	--------	--

Local Users			
User Name	Password Type	Privilege Type	Modify
Bosch	Encrypted	Admin	Delete



4.19 User admin

User admin	Delete	To avoid simple access with admin, admin
------------	--------	--

admin/admin is removed.

4.20 http

http	Disabled	To avoid plain text password exchange
------	----------	---------------------------------------

HTTP Information	
Information Name	Information Value
HTTP Service	Disabled
Session Timeout	10

When using only IP address like default 169.254.255.1:

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This site can't be reached

169.254.255.1 refused to connect.

4.21 LLDP

LLDP	Enabled	For all 10 ports with default TLV's
------	---------	-------------------------------------

LLDP Global Config	
Config Name	Config Value
LLDP Enabled	Enabled
LLDP PDU Disable Action	Flooding
Transmission Interval	30 Secs
Holdtime Multiplier	4
Reinitialization Delay	2 Secs
Transmit Delay	2 Secs

LLDP Port Status		
Port	State	Selected Optional TLVs
GE1	TX&RX	System Name, Port Description, Management Address, 802.1 PVID
GE2	TX&RX	System Name, Port Description, Management Address, 802.1 PVID
GE3	TX&RX	System Name, Port Description, Management Address, 802.1 PVID
GE4	TX&RX	System Name, Port Description, Management Address, 802.1 PVID
GE5	TX&RX	System Name, Port Description, Management Address, 802.1 PVID
GE6	TX&RX	System Name, Port Description, Management Address, 802.1 PVID
GE7	TX&RX	System Name, Port Description, Management Address, 802.1 PVID
GE8	TX&RX	System Name, Port Description, Management Address, 802.1 PVID
GE9	TX&RX	System Name, Port Description, Management Address, 802.1 PVID
GE10	TX&RX	System Name, Port Description, Management Address, 802.1 PVID

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4.22 SNMP

SNMP	Enabled	For remote monitoring. Write (SET) community name: GetSNMPAccess.
------	---------	--

SNMP Information

Information Name	Information Value
SNMP	Enabled

Community Settings

Community Name

Access Right

☐ read-only
 ☒ read-write

Apply

Community Status

No.	Community Name	Access Right	Action
1	GetSNMPAccess	read-write	Delete

4.23 IGMP Snooping

IGMP Snooping	Disabled	IPPA uses many multicast channels and the switch cannot handle all IGMP requests
---------------	----------	--

IGMP Snooping Information	
Information Name	Information Value
IGMP Snooping State	Disable
IGMP Snooping Version	v2
IGMP Snooping V2 Report Suppression	Enable

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4.24 Static DNS server 1

Static DNS server 1	empty	DNS is not used in default configuration
---------------------	-------	--

IP Address Information	
Information Name	Information Value
DHCP State	Disabled
Current IP Address	169.254.255.1
Current Subnet Mask	255.255.0.0
Current Gateway	0.0.0.0
Static IP Address	169.254.255.1
Static Subnet Mask	255.255.0.0
Static Gateway	0.0.0.0
Static DNS Server 1	0.0.0.0
Static DNS Server 2	0.0.0.0

4.25 Static DNS server 2

Static DNS server 2	empty	DNS is not used in default configuration
---------------------	-------	--

IP Address Information	
Information Name	Information Value
DHCP State	Disabled
Current IP Address	169.254.255.1
Current Subnet Mask	255.255.0.0
Current Gateway	0.0.0.0
Static IP Address	169.254.255.1
Static Subnet Mask	255.255.0.0
Static Gateway	0.0.0.0
Static DNS Server 1	0.0.0.0
Static DNS Server 2	0.0.0.0

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4.26 Static Gateway

Static Gateway	empty	This way it is not possible to connect to the switch from another subnet
----------------	-------	--

IP Address Information	
Information Name	Information Value
DHCP State	Disabled
Current IP Address	169.254.255.1
Current Subnet Mask	255.255.0.0
Current Gateway	0.0.0.0
Static IP Address	169.254.255.1
Static Subnet Mask	255.255.0.0
Static Gateway	0.0.0.0
Static DNS Server 1	0.0.0.0
Static DNS Server 2	0.0.0.0

4.27 Default IP address

Default IP address	169.254.255.1	To avoid IP conflicts with a network which uses the default 192.168.1.1
--------------------	---------------	---

IP Address Information	
Information Name	Information Value
DHCP State	Disabled
Current IP Address	169.254.255.1
Current Subnet Mask	255.255.0.0
Current Gateway	0.0.0.0
Static IP Address	169.254.255.1
Static Subnet Mask	255.255.0.0
Static Gateway	0.0.0.0
Static DNS Server 1	0.0.0.0
Static DNS Server 2	0.0.0.0

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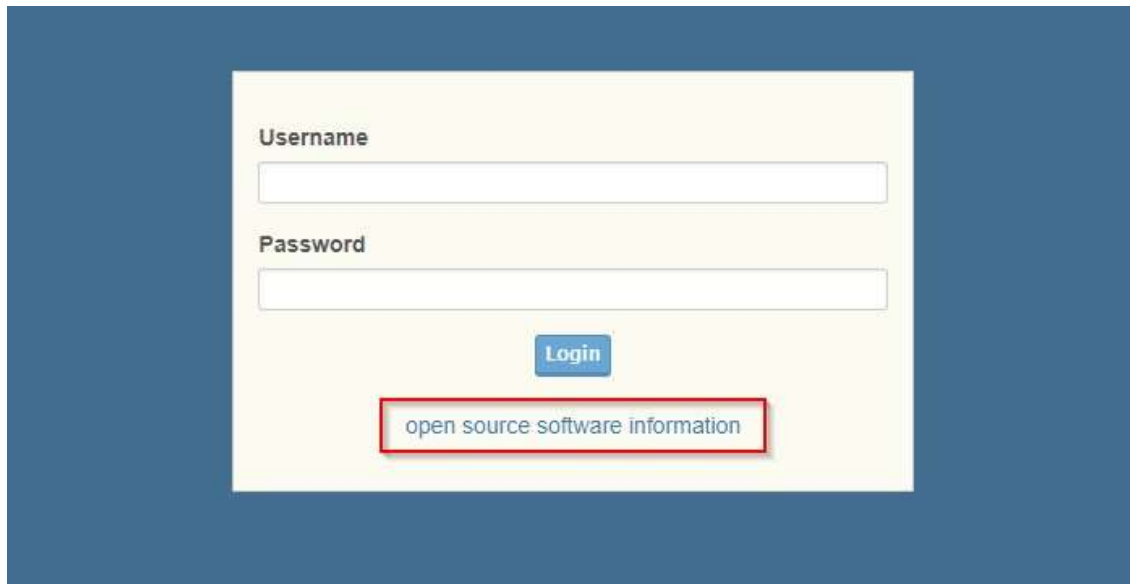
4.28 Port configuration

Port configuration	AUTO, full duplex	For all port 1-10 To make sure the connection is lost even if only a part of the cable is broken/shorted, e.g. link downshift is disabled.
--------------------	-------------------------	---

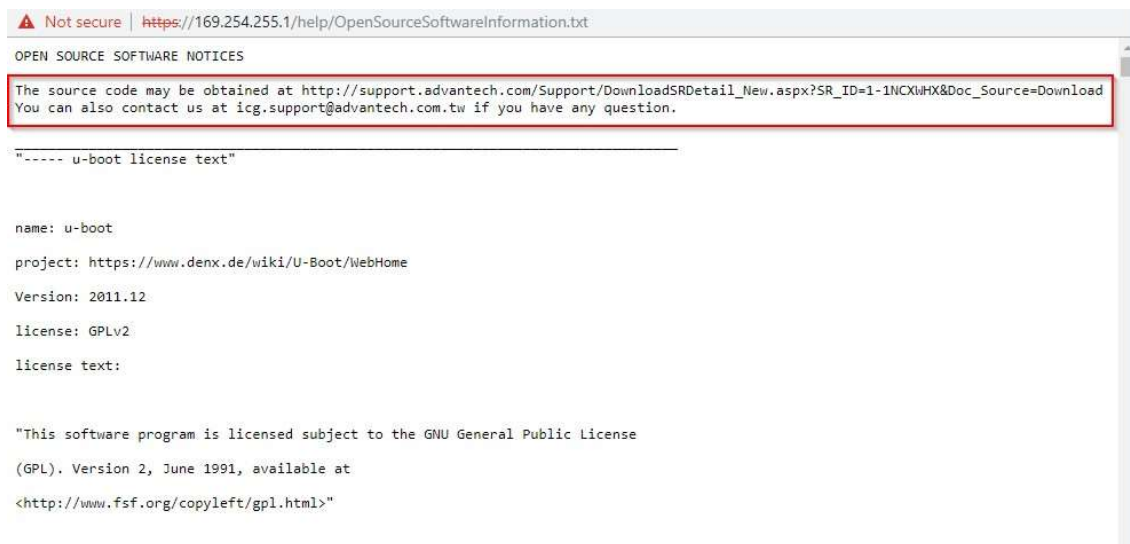
Port Status							
Port	Description	Enable State	Link Status	Speed	Duplex	FlowCtrl Config	FlowCtrl Status
GE1	Edit	Enabled	DOWN	Auto	Auto	Disabled	Disabled
GE2	Edit	Enabled	DOWN	Auto	Auto	Disabled	Disabled
GE3	Edit	Enabled	DOWN	Auto	Auto	Disabled	Disabled
GE4	Edit	Enabled	DOWN	Auto	Auto	Disabled	Disabled
GE5	Edit	Enabled	DOWN	Auto	Auto	Disabled	Disabled
GE6	Edit	Enabled	DOWN	Auto	Auto	Disabled	Disabled
GE7	Edit	Enabled	DOWN	Auto	Auto	Disabled	Disabled
GE8	Edit	Enabled	DOWN	Auto	Auto	Disabled	Disabled
GE9	Edit	Enabled	DOWN	Auto	Auto	Disabled	Disabled
GE10	Edit	Enabled	UP	Auto-1000M	Full	Disabled	Disabled

5. OSS (Open Source Software)

On the login page of the WEBGUI is a link to the open source software created:



When selecting the link, the open source information will be available, including the written offer as indicated:



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6 Confirmation:

The purpose of this confirmation is to ensure that Advantech provides the correct agreed EKI7710G2CPA1801-T configuration based on the most recent customer specifications.

Advantech applied the following final Firmware version **[FW 1.01.04 dated 10-07-2019]** according to Bosch his latest specifications: **[GO010501 Advantech EKI-7710G-2CP Project Document.pdf, Advantech EKI-7710G-2CP Project Document, version 0.10]** which has been released on **[05-08-2019]**.

Any changes in the configuration per customer request after this date will result in additional development costs (NRE fee) on the account of the Customer.

Signature Advantech Europe B.V.

Signature Bosch Security Systems B.V.

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7 Appendix:

Attached project document: GO010501 Advantech EKI-7710G-2CP Project Document.pdf, Advantech EKI-7710G-2CP Project Document, version 0.10.



GO010501

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