ATTENTION – PLEASE READ THIS DOCUMENT IMPORTANT CONFIGURATION DETAILS ARE INCLUDED

New features and configuration settings in AH30 Gen5 Aperio HUBs

The Gen5 hubs are backward compatible with the earlier hub generation and they can be used also as a one to one replacement in case needed.

Since this is a new generation of products besides backward compatibility these units provides additional features and might require additional configuration both at new installations and also for replacement cases.

This document summarises the cases for configuration to highlight changes.

<u>Please read this carefully</u> as the system you are adding this hub might require additional configuration comparing to previous content of hub configuration.

1. Mifare Classic communication mode over RS485

Aperio AH30 RS485 hubs can transmit Mifare credential data to the access control system in different ways. Please consult with your system's supplier what are the required settings for its system.

How to configure to meet with earlier hub generation's settings:

Start HUB configuration and use the *Next* button on the dialogs to arrive page of *Electronic Access Controller Settings*.

At the bottom of the screen you can find *EAC Credential Settings* area. Click on the *Change* button to see screen like below.

Configure Communication Hub [AA96F3]	
Electronic Access Controller Settings Change settings if needed.	
EAC Addressing Mode	
Normal address offset	Include Revert Changes Change
Lock Access Decision Timeout	
2 seconds	Include Revert Changes Change
Remote Unlock	
Remote Unlock Time to Live: 5 minutes	Include Revert Changes Change
Restore EAC Address to DIP Switch Setting	
EAC address via DIP switch setting	Include Revert Changes Change
EAC Credential Settings Disabled for all RFID technologies	
Disable message 0x41 for MIFARE UID Disable message 0x42 for MIFARE UID + Sector data	Include Revert Changes Change
	d Back ▶ Next Cancel

Make sure that both options (Disable message 0x41 for MIFARE UID and Disable message 0x42 for MIFARE UID + Sector data) are <u>unselected like on the screenshot</u>. Click *OK* to continue configuration. This will make your AH30 Gen5 hub 100% backward compatible.

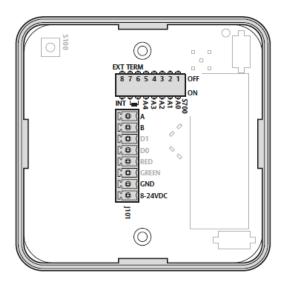
🗢 EAC	Credential Settings	×		
	everse Byte Order			
	MIFARE Classic			
	MIFARE DESFire			
	MIFARE Plus			
	MIFARE Ultralight			
	ISO/IEC 14443B			
MIFARE AADP RS-485 Message Selection Disable message 0x41 for MIFARE UID Disable message 0x42 for MIFARE UID + Sector data				
2	OK Cancel			

2. New DIP Switch settings

While the terminal block and wiring is exactly the same in a Gen5 hub as the previous generation the DIP switch block is different.

Please note the main differences:

- There are no more Pull-up and Pull-down resistors but 2 switches to activate EOL resistor DIP nr 6 and 7. ATTENTION: to activate the EOL resistor you need to switch both nr 6 and 7 to ON position.
- 2. DIP 8 is the antenna selector between internal and external options (it was DIP 10 in the previous generation)



DIP Switch Number	LABEL	DESCRIPTION
1-5	A0-A4	Controls RS485 addressing BIT 0-BIT 4.
		ON => Address bit set.
		OFF => Address bit NOT set.
		See AH30 - RS485 Addressing Reference on page 13.
6-7	TERM	Control use of termination resistor between RS485 A and RS485 B.
		For termination to be enabled, both switches must be set to ON.
		ON =>120 Ohm termination resistor connected/ enabled.
		OFF => 120 Ohm termination resistor disconnected/ disabled.
8	INT/EXT	Controls use of external antenna if required.
		ON =>Selects use of internal antenna.
		OFF => Selects use of external antenna.