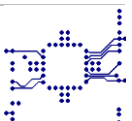


FIRELEC Migration Solution

ABB S600™ (TF620) > S800™

FMS-TF620-S800-1



Contents

- 1. INTRODUCTION3**
 - 1.1. KEY ADVANTAGES OF THE FMS-TF620-S800-1 SOLUTION4
- 2. ANALOG INPUTS5**
 - 2.1. EXISTING CARD TO BE REMOVED: AI620 (16 CHANNEL)6
 - 2.1. EXISTING CARD TO BE REMOVED : AI625 (16 CHANNEL)9
- 3. ANALOG OUTPUTS12**
 - 3.1. EXISTING CARD TO BE REMOVED: AO610 (16 CHANNEL)13
 - 3.2. EXISTING CARD TO BE REMOVED : AO650 (8 CHANNEL).....16
- 4. DIGITAL INPUTS19**
 - 4.1. EXISTING CARD TO BE REMOVED: DI651 (32 CHANNEL)20
- 5. DIGITAL OUTPUTS23**
 - 5.1. EXISTING CARD TO BE REMOVED: DO620 (32 CHANNEL)24

1. INTRODUCTION



The purpose of this document is to guide the user of an ABB S600™ system within the safe, efficient and easy way to migrate toward an ABB S800™ system.

1.1. KEY ADVANTAGES OF THE FMS-TF620-S800-1 SOLUTION

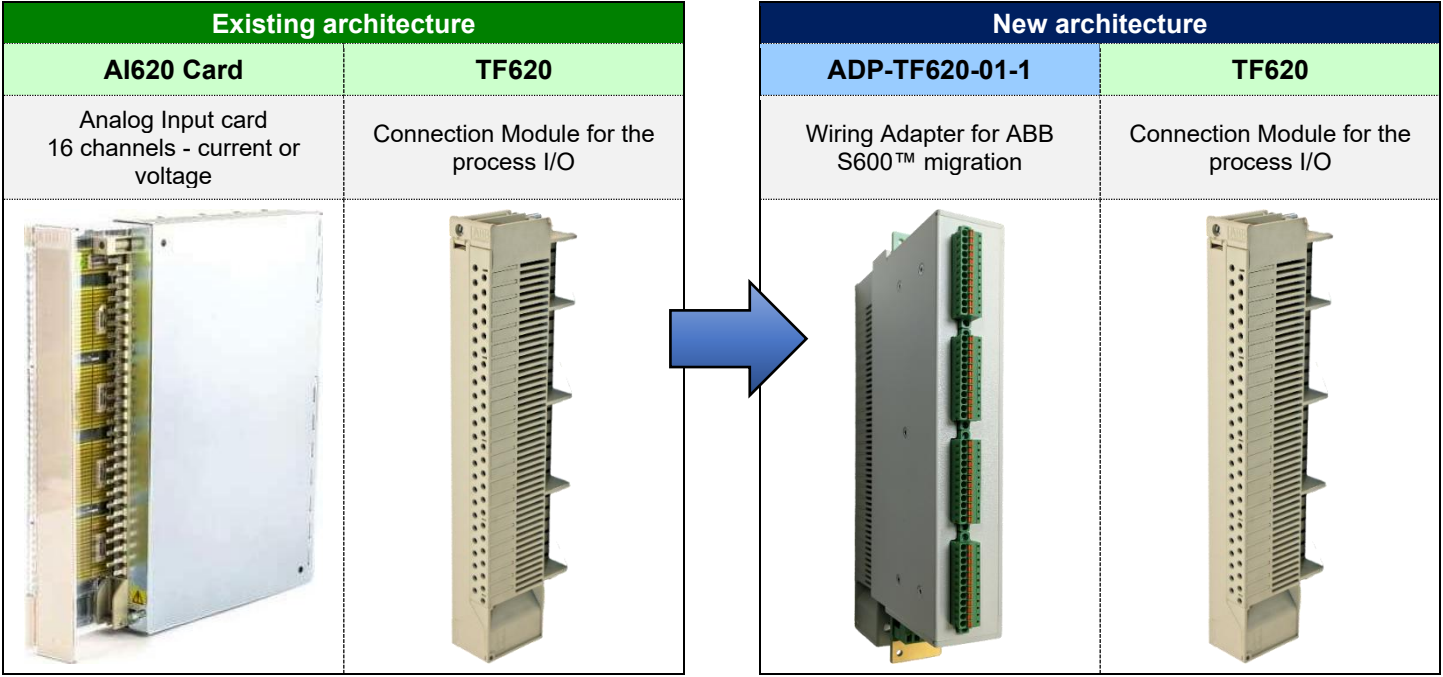
FMS-TF620-S800-1 solution protect your wiring investment as you convert from the ABB S600™ system to the S800™ system of ABB with following advantages :

- **FMS-TF620-S800-1** is a pre-engineered marshalling solution ready to work without any technical rework or limitation regarding the existing capabilities of the ABB S600™ system to be migrated.
- As the instrument wiring is not disturbed, the instrument checkout during startup is reduced to the minimum
- The ABB S800™ system's configuration allows for the engineering conversion to be done efficiently. The speed at which **FMS-TF620-S800-1** solution can be implemented ensures to reduce the process downtime to the minimum.
- All existing documentation (electrical schemes, loop drawings, maintenance procedures,) remain unchanged as the existing I/O wiring is kept in place.

2. ANALOG INPUTS



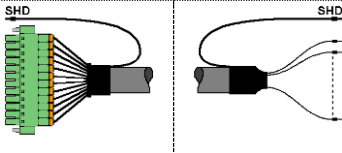
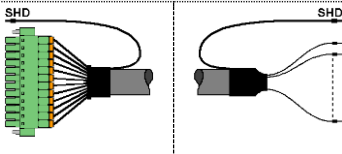
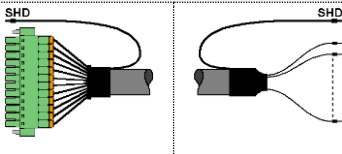
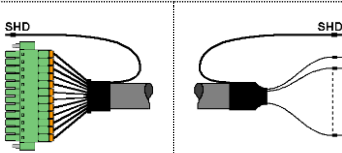
2.1. EXISTING CARD TO BE REMOVED: AI620 (16 channel)

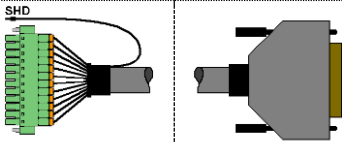
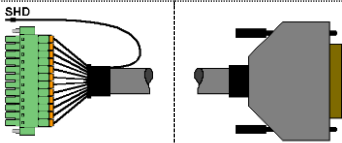
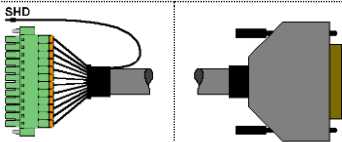
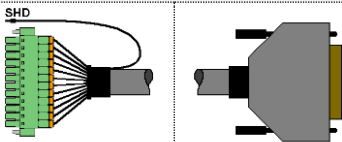


The existing architecture consists of an AI620 card connected to a TF620 on which process I/O are wired.

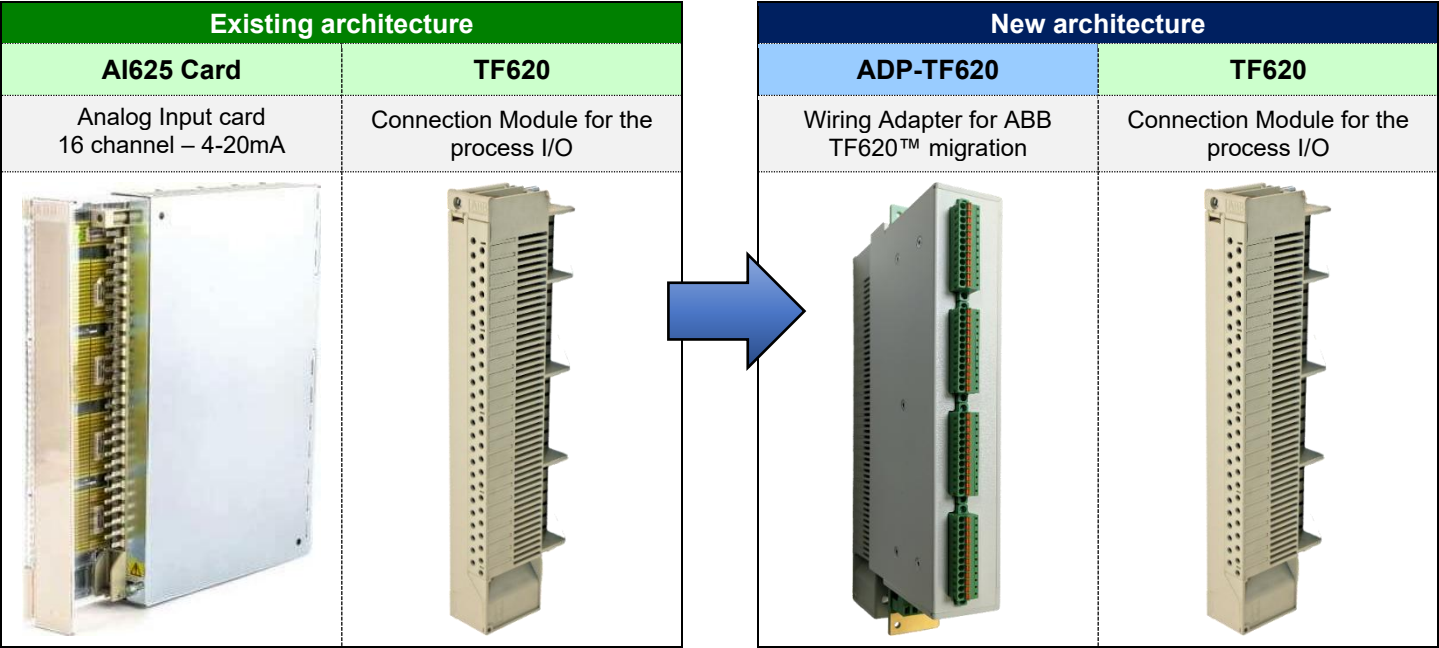
The new architecture consists of keeping the TF620 connector and the associated wiring and replacing the old AI620 card with the ADP-TF620-01-1 migration adapter.

This adapter then allows connection to the corresponding card of an ABB S800™ system.

New ABB S800™ architecture - FMS-TF620-S800-1-A11-A1			
Existing Process Connection	Adapter	Cable	I/O Card
TF620 TF620 Process Connector and associated wiring is kept in place	ADP-TF620-01-1 	Four cables for connection with four ABB cards CH 1 to 4 :  CH 5 to 8 :  CH 9 to 13 :  CH 14 to 16 : 	4 x AI820 + SCREW TERMINAL BLOCK 4CH Differential Analog Input Module +/- 20mA, +/- 10V... 

New ABB S800™ architecture - FMS-TF620-S800-1-A11-A2			
Existing Process Connection	Adapter	Cable	I/O Card
TF620 TF620 Process Connector and associated wiring is kept in place	ADP-TF620-01-1	Four cables for connection with four ABB cards	4 x AI820 + TU812V1 4CH Differential Analog Input Module +/- 20mA, +/- 10V...
		CH 1 to 4 : 	   
		CH 5 to 8 : 	
		CH 9 to 13 : 	
		CH 14 to 16 : 	

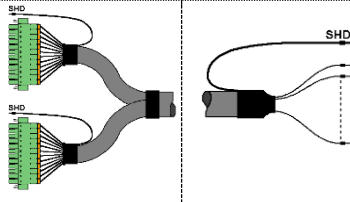
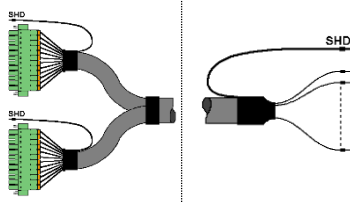
2.1. EXISTING CARD TO BE REMOVED : AI625 (16 channel)

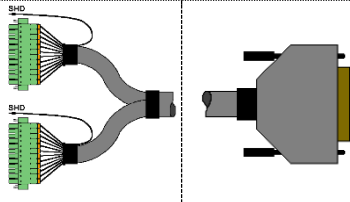
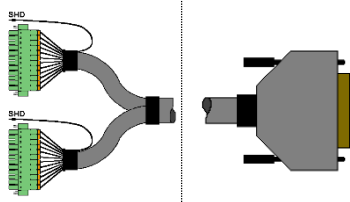


The existing architecture consists of an AI625 card connected to a TF620 on which process I/O are wired.

The new architecture consists of keeping the TF620 connector and the associated wiring and replacing the old AI625 card with the ADP-TF620-01-1 migration adapter.

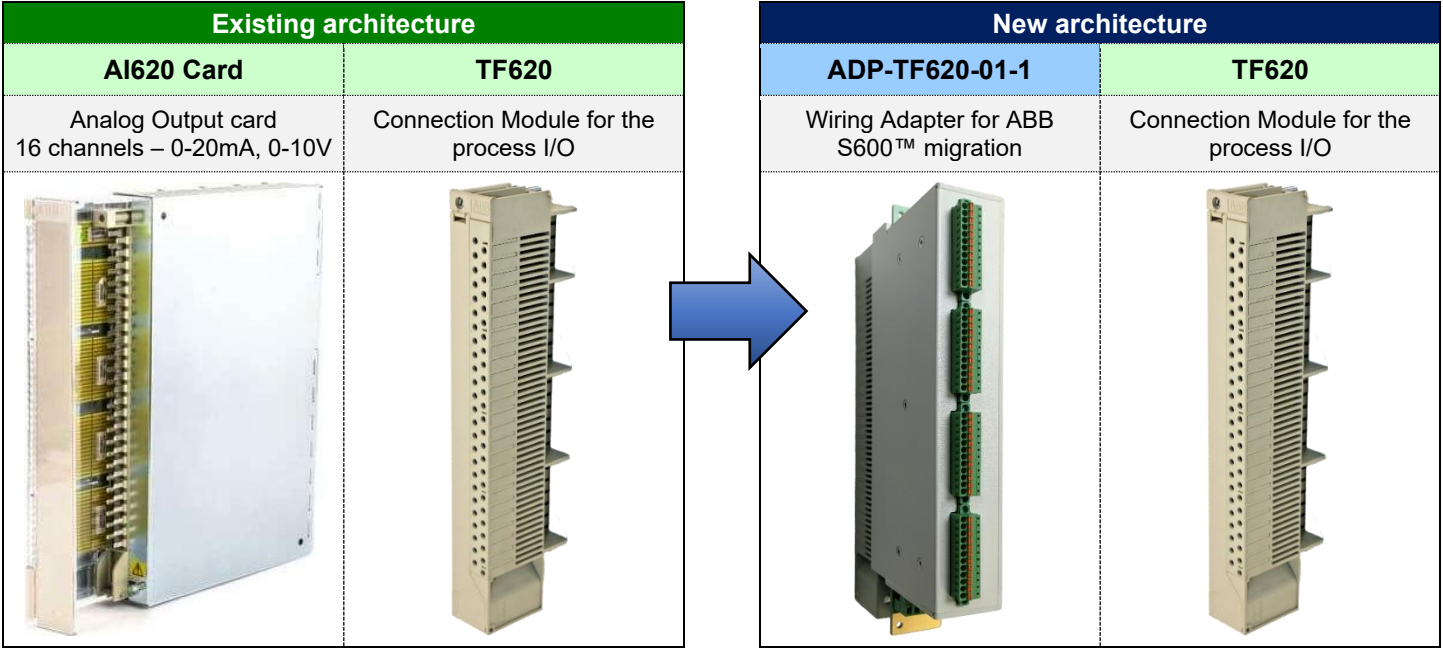
This adapter then allows connection to the corresponding card of an ABB S800™ system.

New ABB S800™ architecture - FMS-TF620-S800-1-AI2-A1			
Existing Process Connection	Adapter	Cable	I/O Card
TF620 TF620 Process Connector and associated wiring is kept in place	ADP-TF620-01-1	Two cables for connection with two ABB cards	2 x AI815 + SCREW TERMINAL BLOCK 8CH Analog Input Module 4-20mA, HART
		CH 1 to 8 :  CH 9 to 16 : 	 

New ABB S800™ architecture - FMS-TF620-S800-1-AI2-A2			
Existing Process Connection	Adapter	Cable	I/O Card
TF620 TF620 Process Connector and associated wiring is kept in place	ADP-TF620-01-1	Two cables for connection with two ABB cards	2 x AI820 + TU812V1 8CH Analog Input Module 4-20mA, HART
		CH 1 to 8 :  CH 9 to 16 : 	 

3. ANALOG OUTPUTS

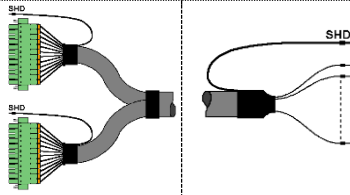
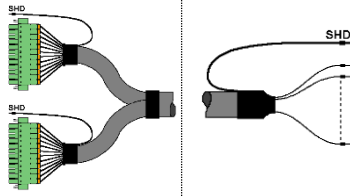
3.1. EXISTING CARD TO BE REMOVED: AO610 (16 channel)

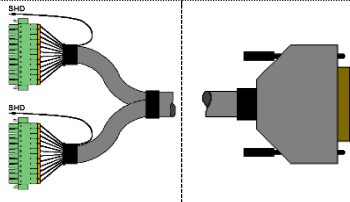
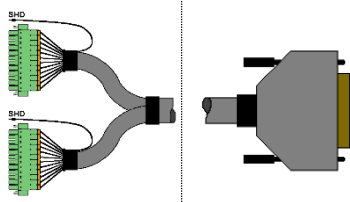


The existing architecture consists of an AO610 card connected to a TF620 on which process I/O are wired.

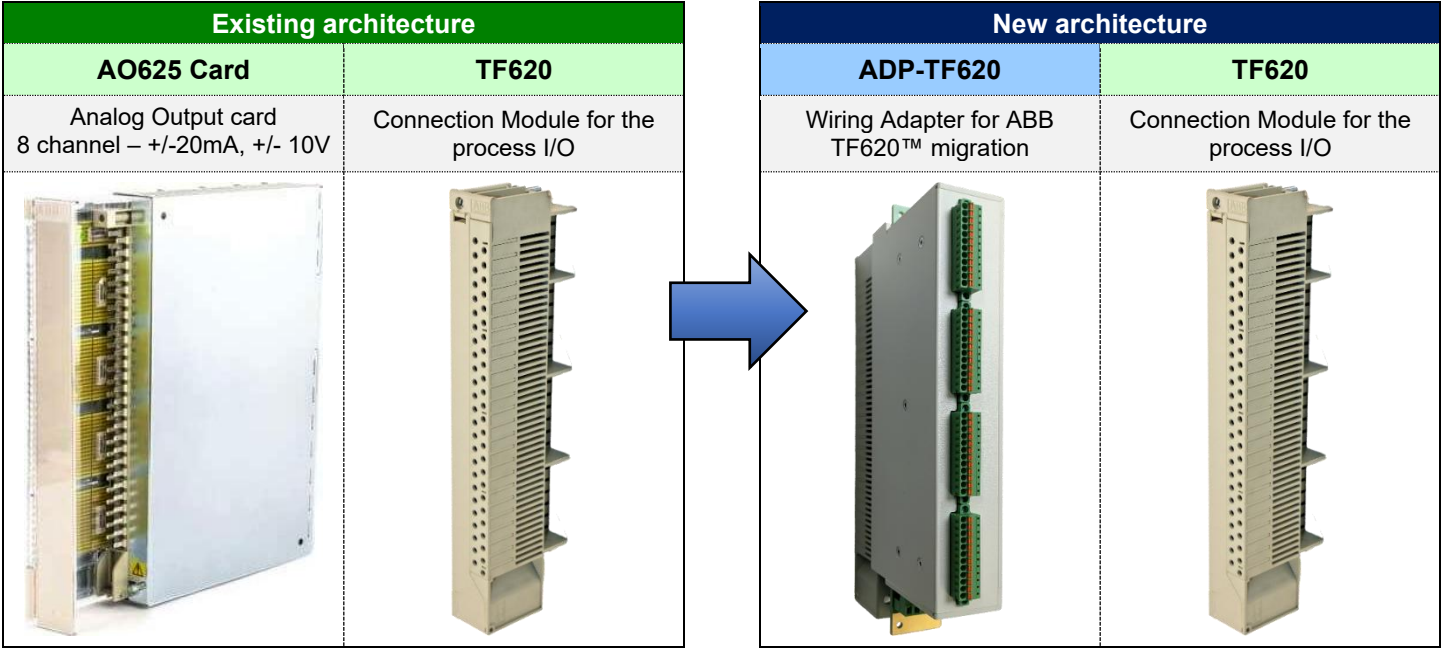
The new architecture consists of keeping the TF620 connector and the associated wiring and replacing the old AO610 card with the ADP-TF620-01-1 migration adapter.

This adapter then allows connection to the corresponding card of an ABB S800™ system.

New ABB S800™ architecture - FMS-TF620-S800-1-AO1-A1			
Existing Process Connection	Adapter	Cable	I/O Card
TF620 TF620 Process Connector and associated wiring is kept in place	ADP-TF620-01-1	Two cables for connection with two ABB cards	2 x AO810 + SCREW TERMINAL BLOCK 8CH Analog Output Module 0(4)-20mA,
		CH 1 to 8 : 	 
		CH 9 to 16 : 	

New ABB S800™ architecture - FMS-TF620-S800-1-AO1-A2			
Existing Process Connection	Adapter	Cable	I/O Card
TF620 TF620 Process Connector and associated wiring is kept in place	ADP-TF620-01-1	Two cables for connection with two ABB cards	2 x AO810 + TU812V1 8CH Analog Output Module 0(4)-20mA,
		CH 1 to 8 : 	
		CH 9 to 16 : 	

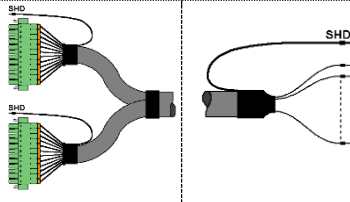
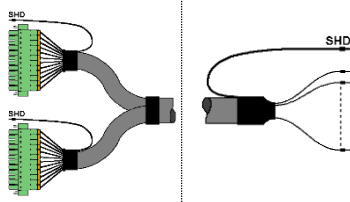
3.2. EXISTING CARD TO BE REMOVED : AO650 (8 channel)

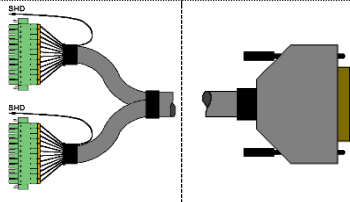
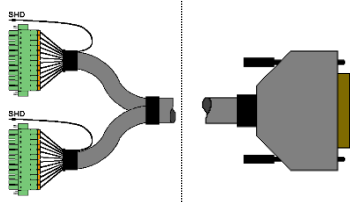


The existing architecture consists of an AO650 card connected to a TF620 on which process I/O are wired.

The new architecture consists of keeping the TF620 connector and the associated wiring and replacing the old AO650 card with the ADP-TF620-01-1 migration adapter.

This adapter then allows connection to the corresponding card of an ABB S800™ system.

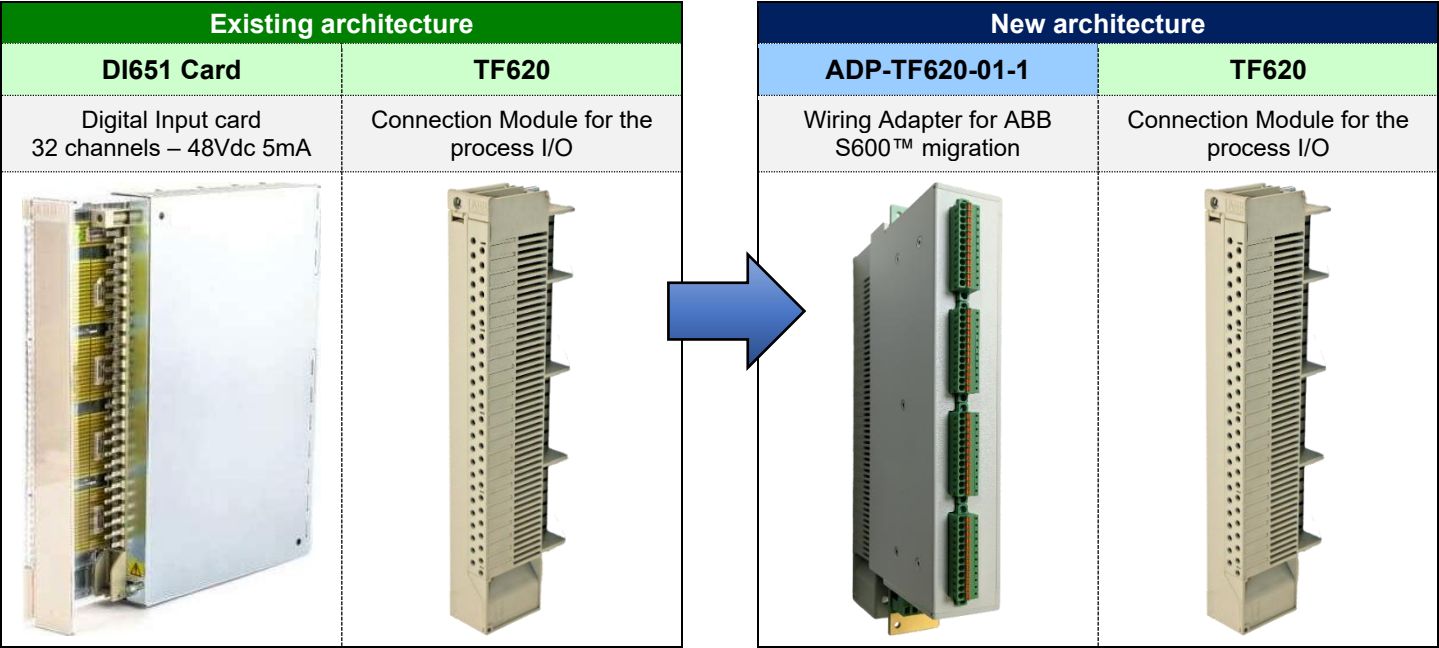
New ABB S800™ architecture - FMS-TF620-S800-1-AI2-A1			
Existing Process Connection	Adapter	Cable	I/O Card
TF620 TF620 Process Connector and associated wiring is kept in place	ADP-TF620-01-1	Two cables for connection with two ABB cards	2 x AO820 + SCREW TERMINAL BLOCK 4CH Analog Output Module +/-20mA, +/- 10V
		CH 1 to 8 :  CH 9 to 16 : 	 

New ABB S800™ architecture - FMS-TF620-S800-1-AI2-A2			
Existing Process Connection	Adapter	Cable	I/O Card
TF620 TF620 Process Connector and associated wiring is kept in place	ADP-TF620-01-1	Two cables for connection with two ABB cards	2 x AO820 + TU812V1 4CH Analog Output Module +/-20mA, +/- 10V
		CH 1 to 8 :  CH 9 to 16 : 	 

4. DIGITAL INPUTS



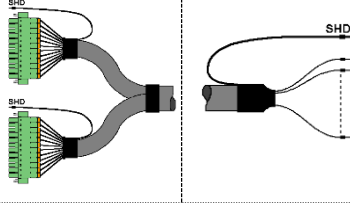
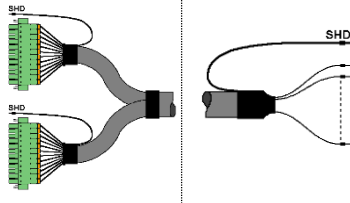
4.1. EXISTING CARD TO BE REMOVED: DI651 (32 channel)

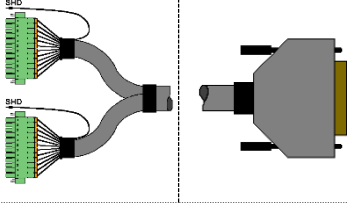
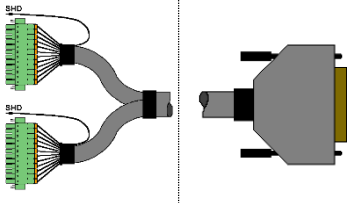


The existing architecture consists of a DI651 card connected to a TF620 on which process I/O are wired.

The new architecture consists of keeping the TF620 connector and the associated wiring and replacing the old DI620 card with the ADP-TF620-01-1 migration adapter.

This adapter then allows connection to the corresponding card of an ABB S800™ system.

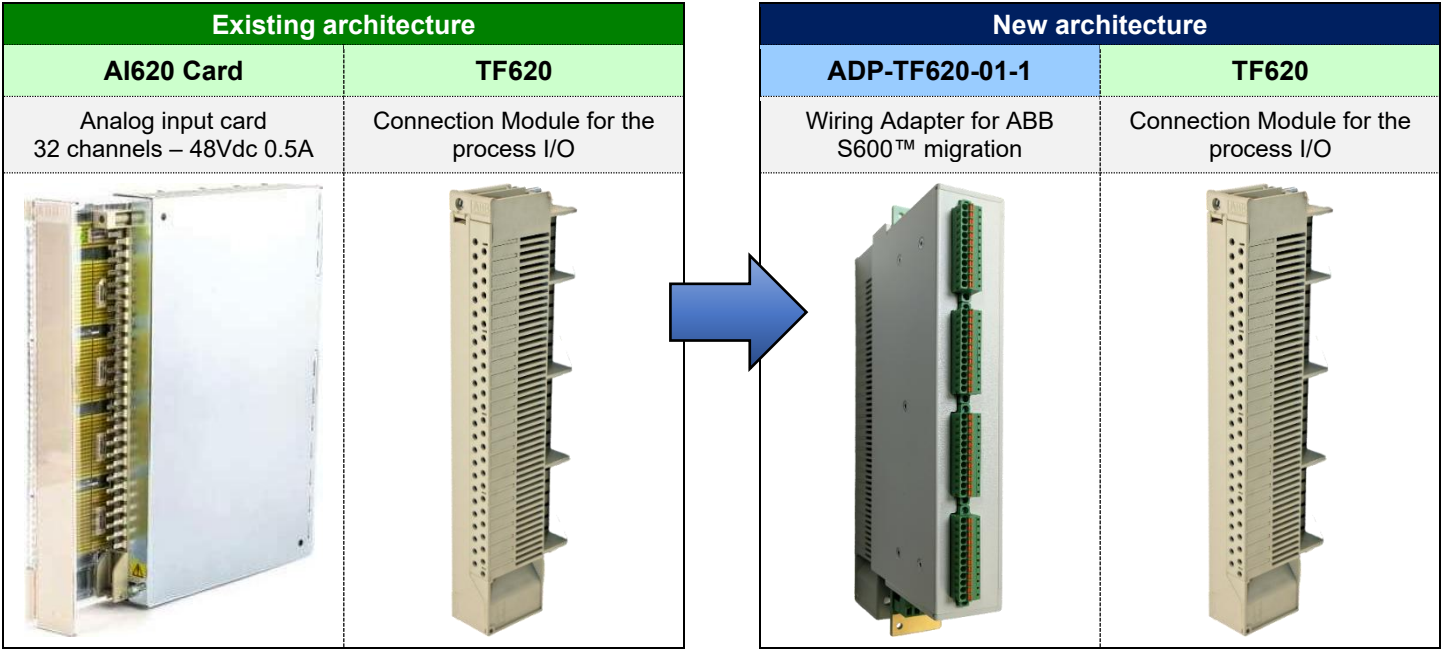
New ABB S800™ architecture - FMS-TF620-S800-1-DI1-A1			
Existing Process Connection	Adapter	Cable	I/O Card
TF620 TF620 Process Connector and associated wiring is kept in place	ADP-TF620-01-1	Two cables for connection with two ABB cards	2 x DI831 + SCREW TERMINAL BLOCK 16CH Digital Input Module 48Vdc 5mA
		CH 1 to 16 : 	 
		CH 17 to 32 : 	

New ABB S800™ architecture - FMS-TF620-S800-1-DI1-A2			
Existing Process Connection	Adapter	Cable	I/O Card
TF620 TF620 Process Connector and associated wiring is kept in place	ADP-TF620-01-1	Two cables for connection with two ABB cards	2 x DI831 + TU812V1 16CH Digital Input Module 48Vdc 5mA
		CH 1 to 16 : 	 
		CH 17 to 32 : 	

5. DIGITAL OUTPUTS



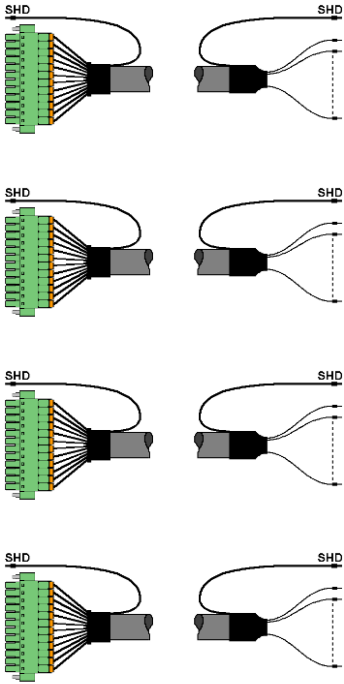
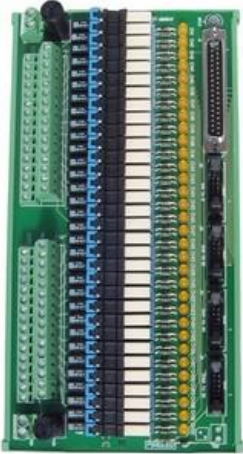
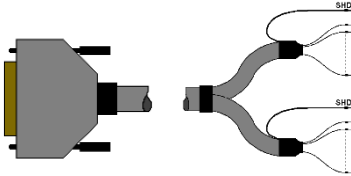
5.1. EXISTING CARD TO BE REMOVED: DO620 (32 channel)

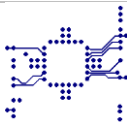


The existing architecture consists of an DO620 card connected to a TF620 on which process I/O are wired.

The new architecture consists of keeping the TF620 connector and the associated wiring and replacing the old DO620 card with the ADP-TF620-01-1 migration adapter.

This adapter then allows connection to the corresponding card of an ABB S800™ system.

New ABB S800™ architecture - FMS-TF620-S800-1-DO1-A1					
Existing Process Connection	Adapter	Cable	Interface	Cable	I/O Card
TF620	ADP-TF620-01-1	Four cables for connection with an INT-DO32-R-F-SLD	INT-DO32-R-F-SLD	One cable for connection with two ABB cards	2 x DO810 + SCREW TERMINAL BLOCK
TF620 Process Connector and associated wiring is kept in place			32 channel - Discrete Outputs with fuses and or solid state relays		16CH Digital Output Module 24Vdc 0.5A
					



New ABB S800™ architecture - FMS-TF620-S800-1-DO1-A1					
Existing Process Connection	Adapter	Cable	Interface	Cable	I/O Card
TF620	ADP-TF620-01-1	Four cables for connection with an INT-DO32-R-F-SLD	INT-DO32-R-F-SLD	One cable for connection with two ABB cards	2 x DO810 + TU812V1
TF620 Process Connector and associated wiring is kept in place			32 channel - Discrete Outputs with fuses and or solid state relays		16CH Digital Output Module 24Vdc 0.5A
		