

FUTURA connect options

The Futura Connect is a multifunctional hub that interfaces the Futura to the outside world. They provide USB, Modbus and Current Loop connections which allow you to connect the Futura's signals to any bioreactor control system so that the Futura is fully integrated with your process system.

The Futura Connect hubs are available in one, four and eight channel models, which gives you greater flexibility in how you configure your system.

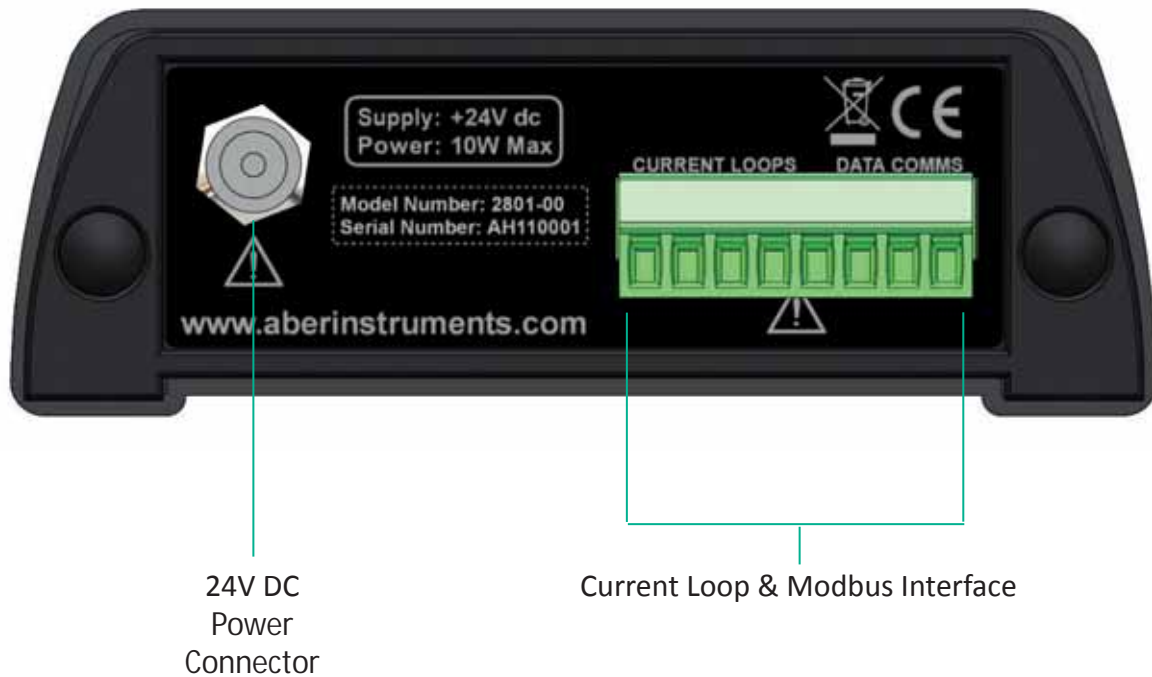
connect details (1 channel shown)

The Front panel provides the FUTURA sockets, with the rear providing both the current loop outputs and the modbus connection point. The 4 and 8 channel connects offer the same connection types but less in number.

FRONT

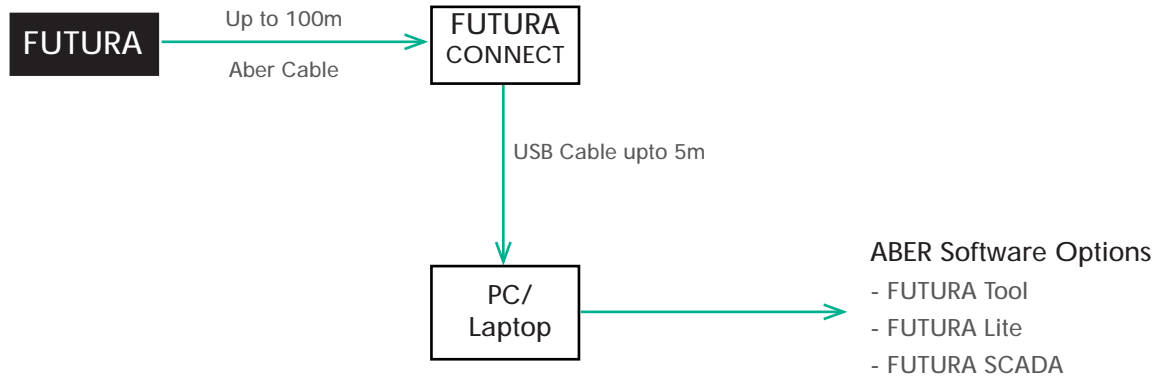


REAR



connect - connection features

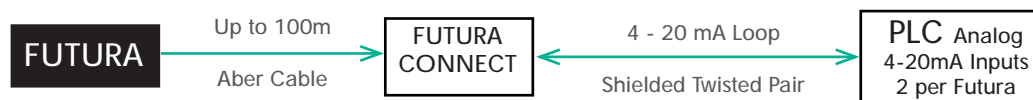
A) FUTURA CONNECT USB



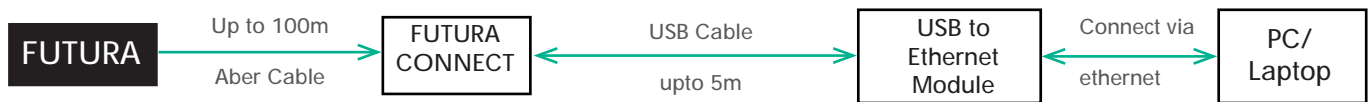
B) FUTURA CONNECT - Modbus (Modbus options are on every 1, 4 and 8 way CONNECT)



C) FUTURA CONNECT - 4-20mA Loop (4-20mA Current Loop options are on every 1, 4 and 8 way CONNECT)



D) FUTURA CONNECT - USB to Ethernet



USB to Ethernet Module

Use an Ethernet module to add connectivity to your FUTURA CONNECT

Description	Part Number
USB to Ethernet Adaptor Module - Belkin FSL009uk or Similar	2801-00

FUTURA CONNECT 1

BIOTECH RANGE



FUTURA CONNECT 1

For use with one FUTURA and one bioreactor.

The Futura Connect provides power from a mains electricity supply to the FUTURA

Communication:

- Connects Aber's FUTURA equipment to a PC via a USB port.
- Provides FUTURA equipment with 2 x 4-20mA Current loop outputs.
- Provides FUTURA equipment with a Modbus Interface to SCADA or a controller

Description	Part Number
FUTURA CONNECT 1	2801-00
FUTURA CONNECT 1 - Din Rail Mountable	2820-00

Technical Specifications

Dimensions	Height: 38 mm	Width: 105 mm
	Depth: 145 mm	Weight: 0.7 kg
Power Supply:	Desktop mains power supply. Aber part number: 2880-35 Nominally 110 to 240 volts AC 50/60Hz. Installation Category II	
Power Consumption:	10W Maximum	
Electrical Safety:	Must use Aber branded external power supply, part number: 2880-35. Safety Standard Applied EN61010. MUST BE EARTHED. Class I - Indoor Use Only.	
Environmental:	Safe ambient operating temperature range: 5°C to 40°C Recommended ambient operating temperature range: 15°C to 30°C Relative Humidity: < 85%. Pollution: Deg 2. (EN61010) Not Waterproof. Recommended operating altitude: < 2000m	

FUTURA CONNECT 4

BIOTECH RANGE



FUTURA CONNECT 4

For use with upto four FUTURA and multiple bioreactors

The Futura Connect provides power from a mains electricity supply to the FUTURA

Communication:

- Connects Aber's FUTURA equipment to a PC via a USB port.
- Provides FUTURA equipment with 8 x 4-20mA Current loop outputs.
- Provides FUTURA equipment with a Modbus Interface to SCADA or a controller

Description	Part Number
FUTURA CONNECT 4	2814-00

Technical Specifications

Dimensions	Height: 88 mm	Width: 175 mm
	Depth: 132 mm	Weight: 1.35 kg
Power Supply:	Desktop mains power supply. Aber part number: 2880-35 Nominally 110 to 240 volts AC 50/60Hz. Installation Category II	
Power Consumption:	60W Maximum	
Electrical Safety:	Must use Aber branded external power supply, part number: 2880-35. Safety Standard Applied EN61010. MUST BE EARTHED. Class I - Indoor Use Only.	
Environmental:	Safe ambient operating temperature range: 5°C to 40°C Recommended ambient operating temperature range: 15°C to 30°C Relative Humidity: < 85%. Pollution: Deg 2. (EN61010) Not Waterproof. Recommended operating altitude: < 2000m	

FUTURA RANGE 2010



◀ FUTURA USB only Hub

For connection to PC via USB

Description	Part Number
Aber USB Hub - 4 Way	2804-00



◀ FUTURA 1 channel CONNECT

For use with one FUTURA and one bioreactor.

- Provides power from a mains electricity supply to the FUTURA
- Connects Aber's FUTURA equipment to a PC via a USB port.
- Provides FUTURA equipment with 4-20mA Current loop outputs.
- Provides FUTURA equipment with a Modbus Interface to SCADA or a controller

Description	Part Number
FUTURA 1 channel CONNECT	2801-00
FUTURA 1 channel CONNECT with Ethernet	2801-36



FUTURA RANGE 2010



◀ FUTURA 4 channel CONNECT

For use with up to 4 FUTURAS and 4 bioreactors

- Provides power from a mains electricity supply to the FUTURA
- Connects Aber's FUTURA equipment to a PC via a USB port.
- Provides FUTURA equipment with 4-20mA Current loop outputs.
- Provides FUTURA equipment with a Modbus Interface to SCADA or a controller

Description	Part Number
FUTURA 4 channel CONNECT	2814-00



◀ FUTURA 8 channel CONNECT

For use with up to 8 FUTURAS and 8 bioreactors

- Provides power from a mains electricity supply to the FUTURA
- Connects Aber's FUTURA equipment to a PC via a USB port.
- Provides FUTURA equipment with 4-20mA Current loop outputs.
- Provides FUTURA equipment with a Modbus Interface to SCADA or a controller

Description	Part Number
FUTURA 8 channel CONNECT	2880-00



Extension Cables

Description	Part Number
5 metre extension cable	1630-24/5
10 metre extension cable	1630-24/10
15 metre extension cable	1630-24/15
20 metre extension cable	1630-24/20
25 metre extension cable	1630-24/25
30 metre extension cable	1630-24/30



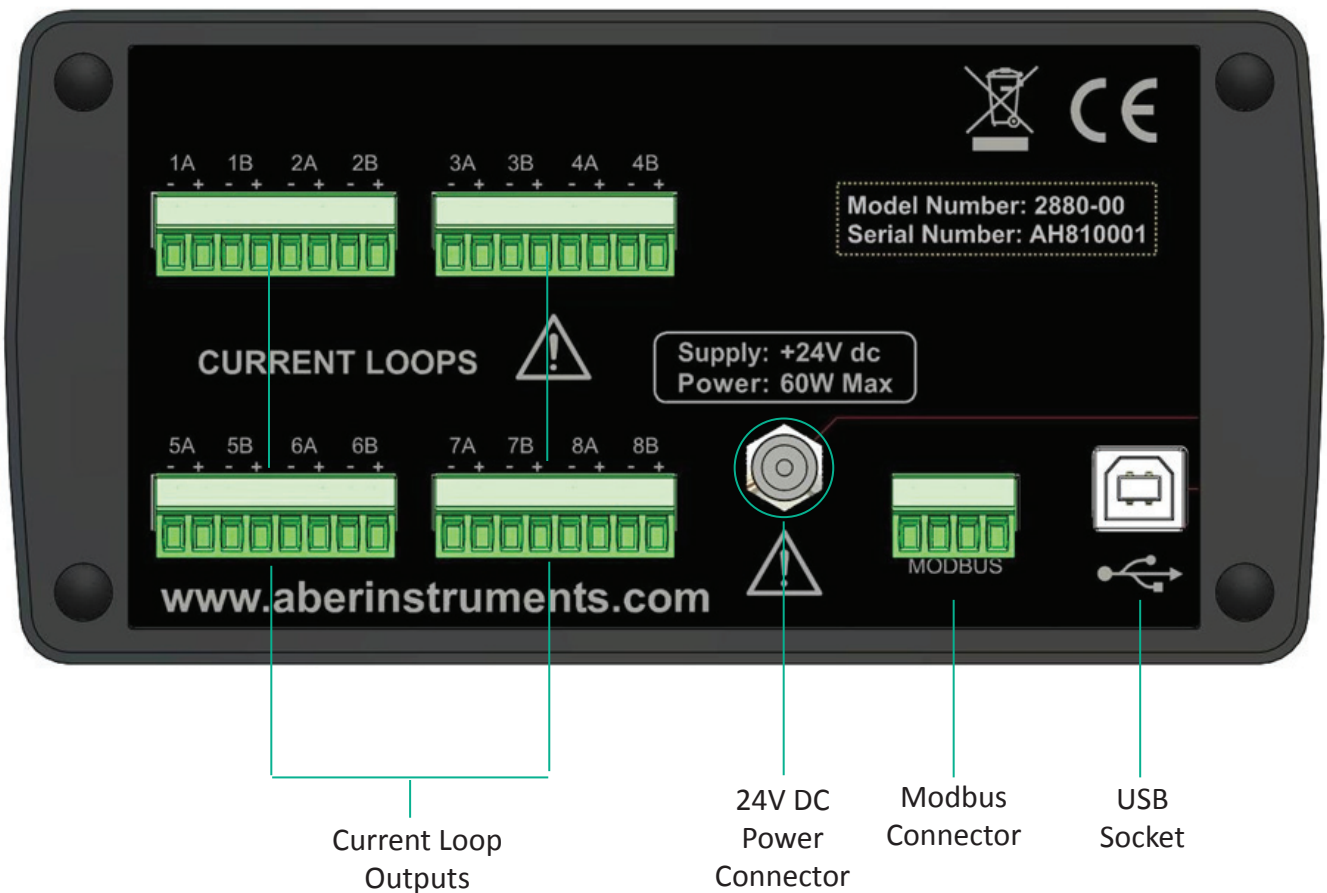
FUTURA CONNECT DETAILS (8 CHANNEL SHOWN)

The Front panel provides the FUTURA sockets, with the rear providing both the current loop outputs and the modbus connection point. The 1 and 4 channel connects offer the same connection types but less in number.

FRONT

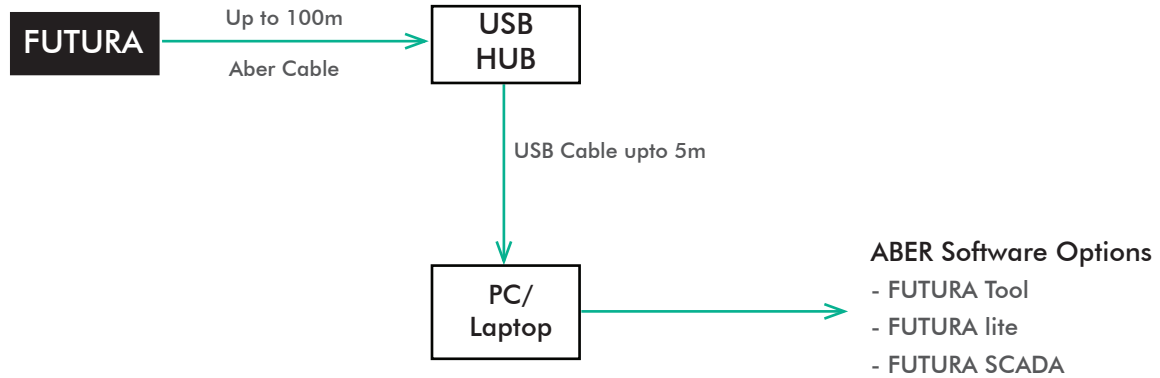


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FUTURA TYPICAL HUB & CONNECT OPTIONS

A) FUTURA USB Hub only option



B) FUTURA CONNECT - Modbus (Modbus options are on every 1, 4 and 8 way CONNECT)

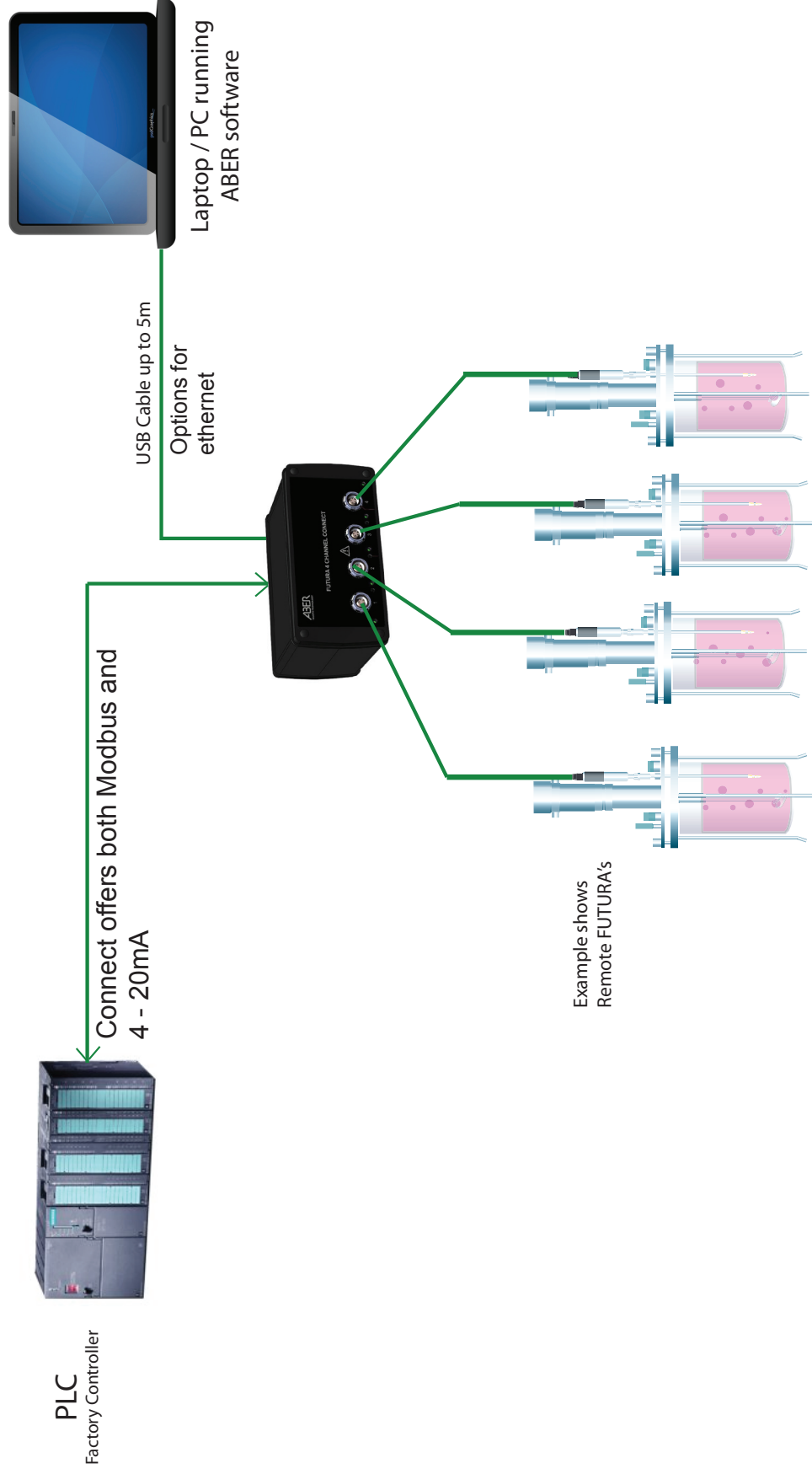


C) FUTURA CONNECT - 4-20mA Loop (4-20mA Current Loop options are on every 1, 4 and 8 way CONNECT)



FUTURA

EXAMPLE OF CONNECTIVITY OPTIONS WITH A 4-WAY CONNECT



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