

KYNOTA's Bioreactor Hardware

**Built to last,
Designed for flexibility**

KYNÖTA

Utility Module (UM) Configuration & Accessories

KYNOTA Dual Utility Module

The KYNOTA Dual Utility Module is designed to be used with two benchtop bioreactors and provides the following functionality for each reactor.

Functionality

- Temperature control via heating blanket
- Agitator control
- Serial connections for scales interface
- Interconnection point for auxiliary IO

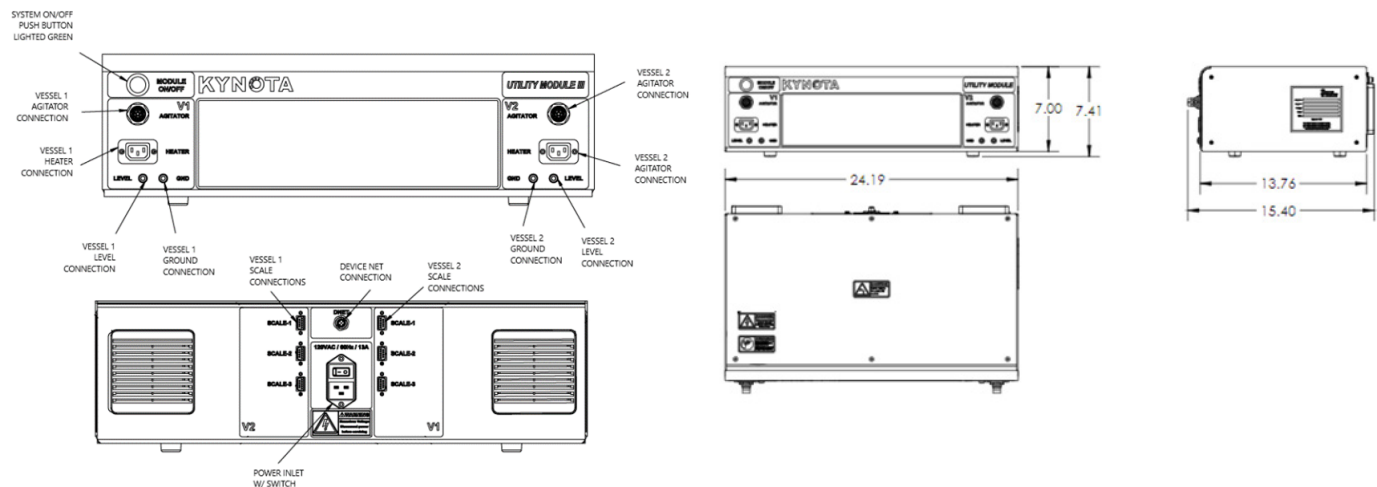
Included Accessories

- Power cable
- DeviceNet cable
- Grounding cable

Other Accessories (not included in base module)

- Agitator and agitator cable
- Heating blanket
- External auxiliary IO module

Drawings



Dimensions: 24.2" Wide, 15.4" Deep, 7.4" Tall

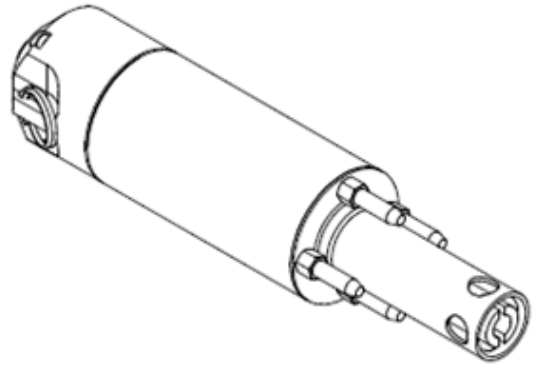
Configuration Options

Power Options

- Standard: USA 110 V, 60 Hz
- Optional: CE 220 V, 50 Hz

KYNOTA Utility Module Accessories

Agitators - AGIT-01 Drawings



KYNOTA

Model #: AGIT01
Serial #: 32300

Max Speed: 800 RPM @ 24VDC
Stall Torque: 420 mNm
Continuous Current: 1.72 A

Heating Blankets

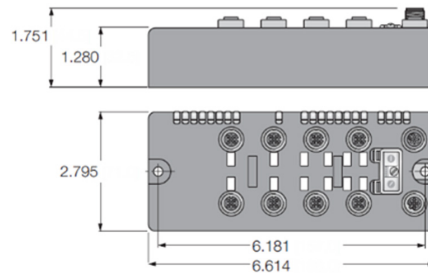
The silicone heater includes Velcro straps with the ability to match the power options of the utility module with various vessel sizes.

External IO

BL Compact Fieldbus Station

This module provides connectivity for up to 8 analog inputs, supporting 4-20ma, 0-10VDC, and -10 to +10 VDC (only 1 type supported at a time).

BL Compact fieldbus station for DeviceNet™
8 Analog inputs for current or voltage
BLCDN-8M12L-4AI-VI-4AI-VI



Gas Module (GM) Configuration & Accessories

KYNOTA Dual Gas Module

The KYNOTA Dual Gas Module is designed to be used with two benchtop bioreactors and provides the following functionality for each reactor.

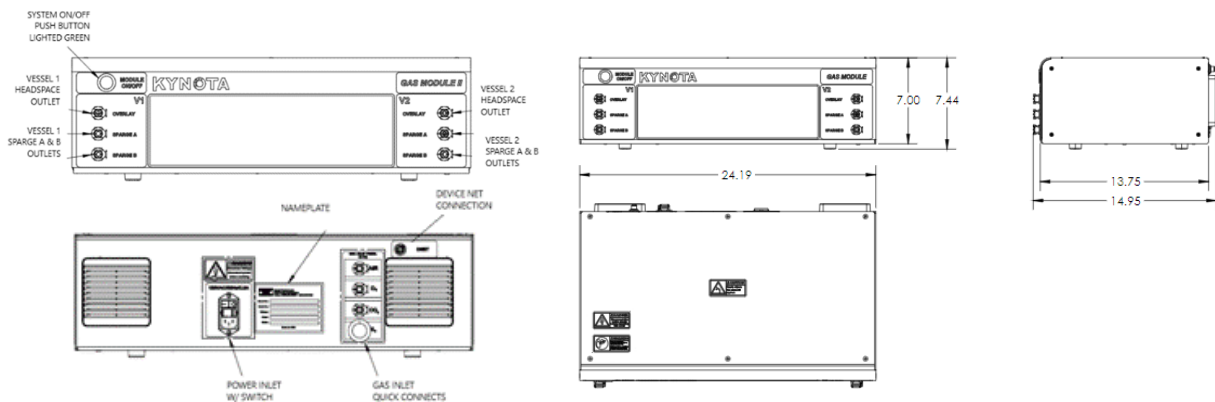
Functionality

- 5 Mass flow controllers
- 3 Outlets

Included Accessories

- Power cable
- DeviceNet cable
- Quick disconnects for gas supply inlet and outlets

Drawings



Dimensions: 24.2" Wide, 15.0" Deep, 7.4" Tall

Details

- Each MFC may only be routed to 2 of the 3 possible outlets
- Mass flow controllers have a 100:1 turndown ratio

Options

Mass Flow Controller Count (required for order)

- 5 (per reactor)

Mass Flow Controller Flow Rates & Gas Configuration (can be specified after order)

- Flow range: 3 SCCM to 3000 SCCM
- Gas types: Air, N₂, O₂, CO₂

Gas Routing (can be specified after order)

Configuration Options

Power Options

- Standard: USA 110 V, 60 Hz
- Optional: CE 220 V, 50 Hz

Transmitter Module (TM) Configuration & Accessories

KYNOTA Transmitter Module

The KYNOTA Transmitter Module is designed to be used with one benchtop bioreactor and provides the following functionality.

Functionality

- pH sensor input (BNC)
- DO sensor input (Lemo L7)
- Temperature sensor input (M8 3 pin)

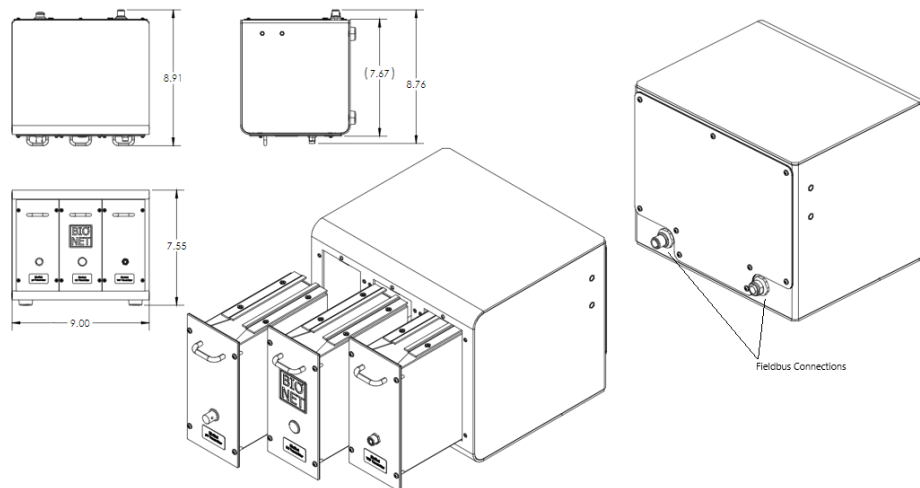
Included Accessories

- Fieldbus cable

Other Accessories (not included in base module)

- RTD's and RTD cables
- pH/DO sensor and sensor cables
- Mounting bracket

Drawings



Dimensions: 9" Wide, 8.9" Deep, 7.6" Tall

Details

Temperature

- KYNOTA connector for use with a 3-wire RTD - Connection is M8 3 pin connector
- Rosemount 644 FF Transmitter

pH

- KYNOTA connector for use with pH probe - Connection is BNC connector
- Rosemount 5081 Transmitter

DO

- KYNOTA connector for use with DO probe - Connection is a Lemo L7 5 pin panel mount jack to accept L6 5 pin Lemo cable end
- Rosemount 5081 Transmitter

Pump Module (PM) Configuration & Accessories

KYNOTA Pump Module

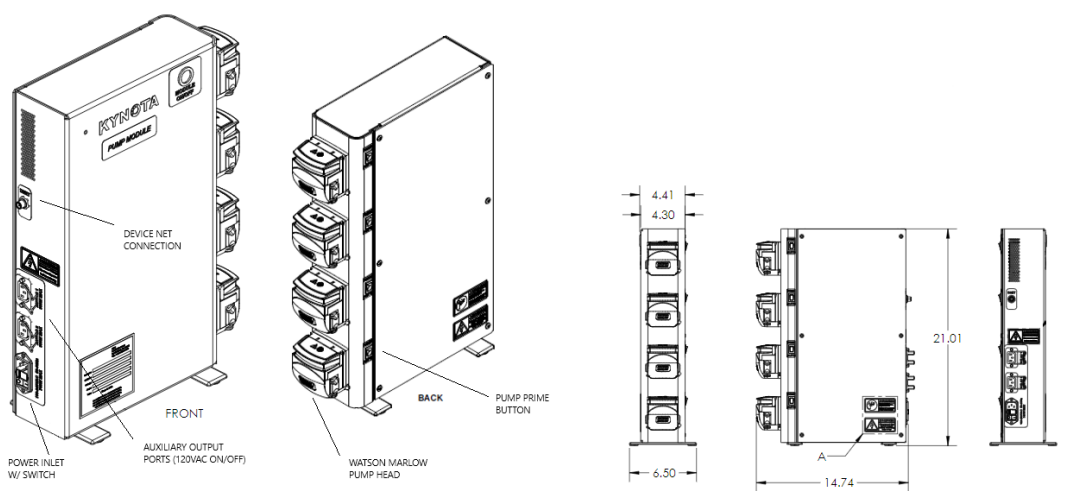
The KYNOTA Pump Module is designed to be used with one benchtop bioreactor and provides the following functionality.

- 4 Variable speed pumps
- 2 Auxiliary output ports (120VAC on/off)

Included Accessories

- DeviceNet cable
- Power cable
- Power cord adapter (2) for 120VAC auxiliary

Drawings



Dimensions: 6.5" Wide, 14.7" Deep, 21.0" Tall

Details

Pump Configuration (default)

- 35 RPM
- 314D Pump head

Options

Motor Speed (required for order)

Options

- 35 RPM (default)
- 100 RPM
- 350 RPM

Pump Head (required for order)

Options

- 314D (default)
- 114

Configuration Options

Power Options

- Standard: USA 110 V, 60 Hz
- Optional: CE 220 V, 50 Hz

MCM Module (PM) Configuration & Accessories

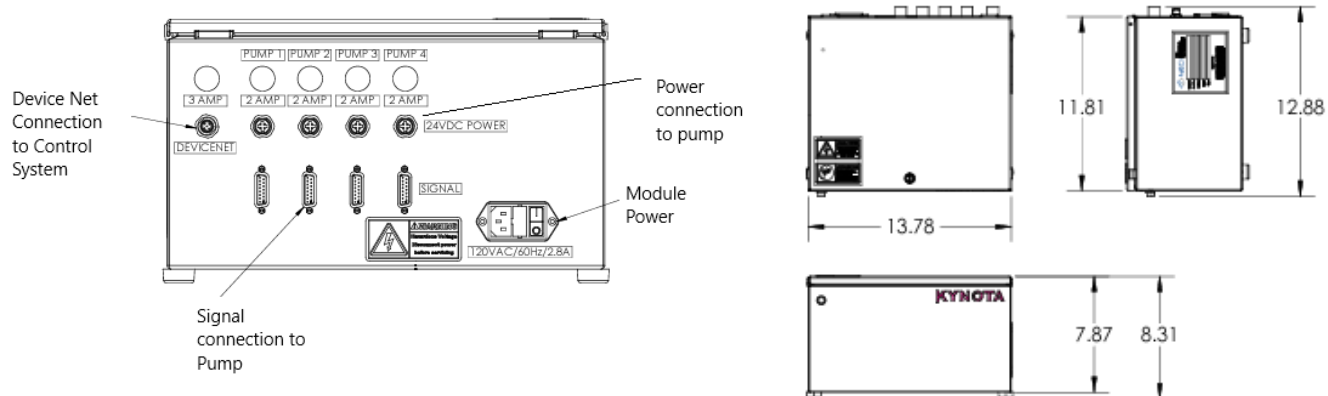
KYNOTA MCM Module

The KYNOTA MCM Module is designed to be used with one or two benchtop bioreactors and provides the ability to control 4 variable speed case pumps.

Included Accessories

- DeviceNet cable
- Power cable

Drawings



Dimensions: 13.8" Wide, 12.9" Deep, 8.3" Tall

Details

Pump Configuration (default)

- 1-4 120U Watson Marlow Case Pumps

Configuration Options

Power Options

- Standard: USA 110 V, 60 Hz
- Optional: CE 220 V, 50 Hz

Vessel Packages

2 Liter Vessel

- Cell culture
- Microbial fermentation
- Total volume 2.0 L
- Working volume 1.7 L
- Minimum working volume 0.47 L

3 Liter Vessel

- Cell culture
- Cell culture, jacketed
- Microbial fermentation
- Microbial fermentation, jacketed
- Total volume 3.2 L
- Working volume 2.7 L
- Minimum working volume 0.47 L

5 Liter Vessel

- Cell culture
- Microbial fermentation
- Total volume 5.0 L
- Working volume 3.75 L
- Minimum working volume 1.5 L

7 Liter Vessel

- Cell culture
- Cell culture, jacketed
- Microbial fermentation
- Microbial fermentation, jacketed
- Total volume 6.9 L
- Working volume 5.2 L
- Minimum working volume 2.0 L

15 Liter Vessel

- Cell culture
- Microbial fermentation
- Total volume 16.5 L
- Working volume 12 L
- Minimum working volume 2.5 L

20 Liter Vessel

- Cell culture
- Microbial fermentation
- Total volume 23.0 L
- Working volume 16.0 L
- Minimum working volume 2.5 L

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Contact us for more information

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