GBC General Biologicals Corporation

GBC AIO M160

All-in-One Molecular System

Full Automation

Less than 2 hours from sample to result.
True walk-away platform.
Prefilled proprietary extraction plates.
For liquid PCR master mix.
Intuitive and easy-to-operate user interface.
Different data transfer options (LIS) available.
Small footprint.

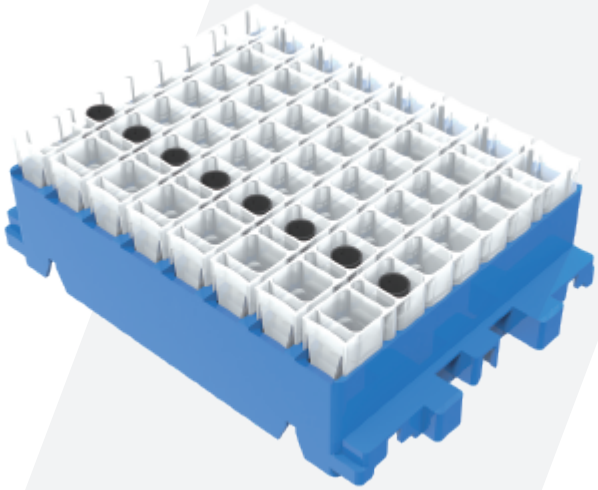
PCR set-up cartridges

Provides reagents and plastic consumables needed for sample processing.

Transfer the liquid PCR master-mix.

PCR reaction tube & cap, and tip for liquid transfer readily available for automated processing.

Waste reduction due to thought-through and efficient concept.

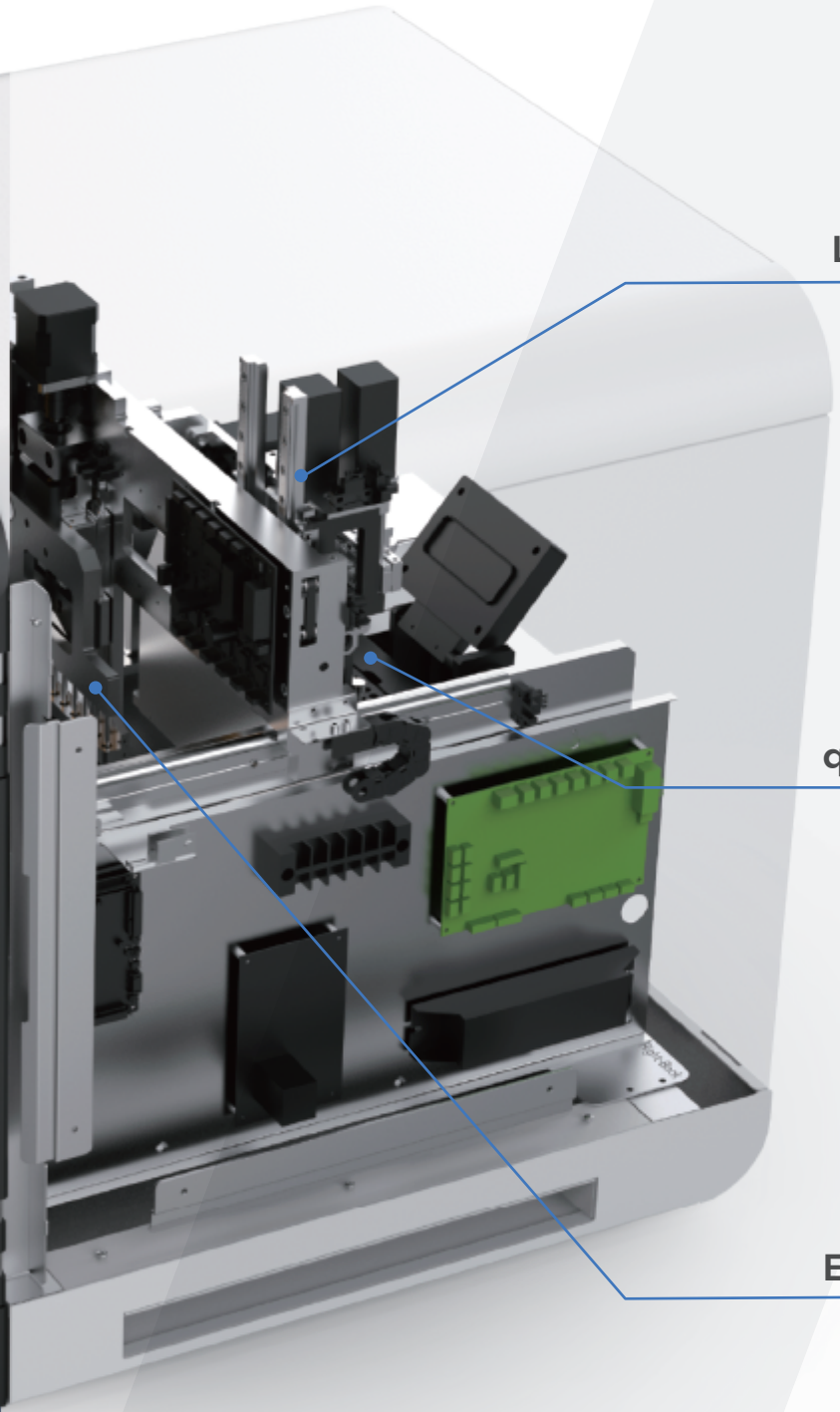


Pre-filled extraction plates

For processing up to 16 samples/run (2 plates).
Provides all necessary for contamination-free extraction.
Residual eluate can be stored for additional downstream applications.
Contains the magnetic rod cover and store it after use for safe waste disposal.

Works with GB RealQuant® Real-Time PCR kits

PCR modules with 5 detection channels are available, for maximum flexibility in building your optimal platform.



Liquid handling module

For rapid sample and eluate transfer.
Performs preparation of PCR reaction mix.
Unique design enables capping and transfer of PCR reaction tubes to PCR module.

qPCR module

5-channel qPCR for up to 16 samples/run.
Provides fast cycling capability for results in less than 40 minutes. (depend on assay protocol)

Extraction module

Two 8-magnetic-rod arms for processing magnetic bead based extraction.
Fast and contamination-free nucleic acid extraction in 10 - 40 minutes.

Simplify your Lab Workflow

The GBC AIO M160 System consolidates extraction, amplification and detection in one easy-to-use integrated instrument, providing fast and reliable results with high flexibility.

Specifications

Extraction module

Sample capacity	1-16 samples / run
Sample input volume	100 - 400 µL
Elution volume	80 - 200 µL
Extraction time	10-40 minutes / run (dependent on protocol used)
Magnetic beads recovery rate	98%
UV decontamination	Built-in

Liquid handling module

Pipetting volume	10-200 µL
Pipetting accuracy	10 µL < 5% 200 µL < 1%

qPCR module

Sample input volume	10 - 50 µL
Reaction temperature	4 - 99 ℃
Light source	High-Brightness LED, 5-channels
Excitation wavelength	470 nm - 670 nm (± 10 nm) [FAM, HEX/VIC, ROX, CY5, CY5.5]
Detection wavelength	520 nm - 710 nm (± 10 nm) [FAM, HEX/VIC, ROX,, CY5, CY5.5]

Platform dimensions

Dimensions (W x D x H)	610 x 670 x 660 mm
Weight	76 kg

Choose from extraction consumables for optimal DNA and RNA extraction results from your specific sample types.

Sample type	GB Virus DNA/RNA Universal Kit	GB DNA Kit
Plasma / Serum	V	X
Whole Blood	V	V
Stool	V	X
Fresh-frozen tissue	X	V

Platform Loading → Extraction → PCR Set-up → qPCR Run

Scan kit's barcodes & sample IDs
Load consumables & samples
5-8 minutes hands-on

Fully automated processing and analysis
Results in 1-2 hours, dependent on protocols

START

Extraction Set-Up

Scan PCR assay details

Scan sample IDs

Load consumables

Start run

Result analysis & display

Intuitive user interface for
secure and time-saving operation

ORDERING INFORMATION:

Catalogue No.	Product
4MGAIO	**GBC AIO M160**

About GBC

Founded in 1984, General Biologicals Corporation (GBC) is a pioneer in Taiwan's in-vitro diagnostics (IVD) industry, originating from the National Hepatitis Prevention Program initiated by the Executive Yuan. For over 40 years, GBC has been committed to delivering innovative, accurate, and accessible diagnostic solutions that improve healthcare outcomes worldwide.
As a GMP-certified and ISO 13485-compliant manufacturer, GBC specializes in the research, development, production, and global distribution of advanced IVD products and integrated diagnostic technologies. Our solutions are trusted in 40+ countries, empowering hospitals, clinical laboratories, blood banks, and healthcare professionals with reliable, high-performance tools for disease detection and monitoring.

Core Expertise:

- Infectious & Respiratory Diseases
- Blood-Borne Viruses
- Fertility & Sexual Health
- Oncology & Tumor Markers
- Human Genetics
- Emerging Infectious Diseases

Reveal. Better Life.

GBC General Biologicals Corporation

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