

Model :

**XM-GC- X20**



## Gas Chromatography

## Overview

Gas Chromatography XM-GC- X20 is a compact and tabletop, Flame Ionization Detector (FID) comprised gas chromatography, comes with RT to 450°C of temperature range and 40°C / min of maximum heating rate. With optional detectors such as TCD, ECD, FPD, and NPD, features 3 detectors installation at a time, offers packed column and capillary column installation at the same time. Designed with large oven capacity to hold 2 capillary column of 0.32 mm diameter, thermal insulation and chromatography workstation software, supports self-test, power protection, keyboard lock, automatic ignition and anti-power mutation interference function. Equipped with 5.7-inch LCD display, double column compensation function and internet connection, this gas chromatography offers 16-phase temperature program with effective restraining of baseline drift and the influence of background noise.

## Features :

- A compact and tabletop, Flame Ionization Detector (FID) comprised gas chromatography
- RT to 450°C of temperature range and 40°C / min of maximum heating rate with 16-phase temperature program
- TCD, ECD, FPD, and NPD as optional detector, with 3 detectors installation at a time
- Packed column and capillary column installation at the same time
- Large oven capacity to hold 2 capillary column of 0.32 mm diameter
- Thermal insulation, maximum outer chamber temperature of 400°C
- Chromatography workstation software, for easy and convenient data processing
- Supports self-test, power protection, keyboard lock, automatic ignition and anti-power mutation interference function
- 5.7-inch LCD display, for convenient indication of temperature, time and gas flow

- Double column compensation function for effective restraining of baseline drift and the influence of background noise
- Internet connection for easy data transferring and program update
- Highly-efficient, stable and reliable with easy and convenient operation

## Specifications :

Oven	Temperature Range	RT to 450°C
	Temperature Accuracy	≤±0.1°C
	Temperature Program	16-phase
	Maximum Temperature Heating Rate	40°C/min
Sample Injector	Temperature Range	RT+ 7 °C to 420 °C
	Temperature control	Automatic
	Injector type	Column or split
	Maximum sample inlet	3 pcs
	Carrier gas flow type	Constant pressure
	Pre column pressure range	0 to 400 kPa
	Pre column pressure accuracy	0.1 kPa
	Mobile phase flow range	H : 0 to 200 ml/min, N : 0 to 150 ml/min

FID Detector	Temperature Range	RT+ 7 °C to 420 °C
	Maximum installation	Dual detector
	Flame ignition mode	Automatic
	Flame Ionization Detector (FID)	Logarithmic amplifier Mechanical valve Baseline signal display Ignition coil control
	Detection limit	$\leq 3 \times 10^{-12}$ g/s (Sample: nhexadecane)
	Baseline drift	$\leq 1 \times 10^{-13}$ A/30 min
	Linear range	$\geq 10^7$
Power Supply	AC 110/220 V $\pm$ 10%, 50/60 Hz	
Packaging Dimension (WxDxH)	820x670x600 mm	
Gross weight	71 kg	

### Applications :

Gas Chromatography is used for the separation of compounds in complex mixtures based on the polarity of compound across food industries, pharmaceuticals, dairy, microbiology, biotechnology, environmental analysis etc.

### Standard Accessories :

FID detector

Chromatography workstation software

Accessories NO	Accessories Name	
1	Hydrogen generator	
2	Air generator	
3	Thermal Conductivity Detector (TCD) (Optional)	Sensitivity: >10000 mv. ml/ mg (Sample: n-hexadecane) Linear range: $\geq 10^5$
4	Electron Capture Detector (ECD) (Optional)	Detection limit: $\leq 1 \times 10^{-14}$ g/ml (Sample: n-hexadecane $\delta$ -666) Linear range: $\geq 10^3$
5	Flame Photometric Detector (FPD) (Optional)	Detection limit: $\leq 2 \times 10^{-11}$ g/s (S of thiophene) Detection limit: $\leq 1 \times 10^{-12}$ g/s (P of methyl parathion) Linear range (S): $\geq 10^2$ Linear range (P): $\geq 10^3$
6	Nitrogen and Phosphorus Detector (NPD) (Optional)	Detection limit: $\leq 1 \times 10^{-12}$ g/s (Azobenzene) Detection limit: $\leq 1 \times 10^{-12}$ g/s (Marla sulfur phosphorous) Linear range: $\geq 10^3$

**XENOMECH ANALYTICAL INSTRUMENTS PVT.LTD.**

**Mfrs.: HIGH QUALITY ANALYTICAL & SCIENTIFIC LABORATORY INSTRUMENTS**