

IntelliSwitch Systems

539 SERIES

IntelliSwitch

The 539 Series IntelliSwitchTM is CONCOA's original fully-automatic computer controlled Universal Gas Management System that can provide continuous supply of gas from either cryogenic liquid cylinders or high pressure gas cylinders, or any combination of both. These systems are ideal for use with high purity and ultra high purity gases for laboratory gas chromatograph, gas chromatograph mass spectrometer, inductively coupled plasma or inductively coupled plasma mass spectrometer support gases as well as for use with $\mathrm{CO_2}$ or Nitrogen for cell culture incubators. The proprietary software ensures optimal use and savings especially from cryogenic cylinders sources and can greatly reduce or eliminate venting and residual gas return.

Typical Applications

High purity non-corrosive non-flammable gas supply

Gas chromatograph and mass spec carrier and support gases

Inductively coupled plasma mass spectrometer (ICP-mass spec) continuous gas supply

Incubator CO₂ and Nitrogen gas supply

Biotech, pharmaceutical and forensic gas systems

Microbulk changeover supply

Central gas supply system for laboratory, research or process plants



Features

Microprocessor Control

Fully automatic priority assignment

Field Adjustable Parameters

Enables process flexibility

On-Site Source Selection

Liquid cylinder or high-pressure service

Low Loss Technology

Reduces residual return

Electronic Economizer

Eliminates vent loss from 230 PSIG (15 BAR), 350 PSIG (24 BAR), or 500 PSIG (34 BAR) liquid cylinders

Process Gas or Air Actuated Pilot Valves

Simple installation

RS 232 Communications

Provides remote monitoring of supply

NEMA 12 Enclosure

Powder coated for indoor use only

Materials

Regulator and Valve Bodies

Brass barstock

Valve Stems

316L stainless steel

Valve Seats

PCTFE

Seals

PTFE, PCTFE and Viton®

Enclosure

NEMA 12 powder-coated steel

Specifications

Power Requirements

110 or 220 VAC

Maximum Inlet Pressure

3000 PSIG (210 BAR)

Temperature Range

0°F to 140°F (-18°C to 60°C)

Flow Capacity

Cv = 1.0

Filter

40 micron

Inlet Connection

1/2" FPT

Outlet Connection

1/2" FPT

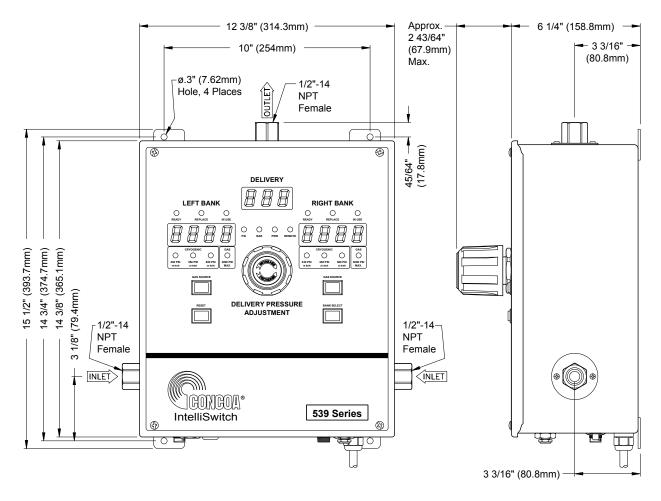
Weight

67 lbs. (30.4 kg)

IntelliSwitch Systems



Installation Dimensions



Ordering Information							
539	Α	В	С	D	-XX	-CON	
Series 539	Outlet Pressure	Right Side Connection	Left Side Connection	Assembly	Assembly	Hose	
	2: 0-50 PSIG (0-1 BAR)	0: 1/2" FPT	0: 1/2" FPT	2: 110 VAC	-01: Standard	Please specify inlet connection	
	3: 0-100 PSIG (0-7 BAR)	1: Diaphragm valve with 36" (900mm) stainless flexible hose	1: Diaphragm valve with 36" (900mm) stainless flexible hose	3 : 220 VAC	-0A: Tamper resistant option	cGA DIN 477 BS 341 and others	
	4: 0-150 PSIG (0-10 BAR)	2: Diaphragm valve with 72" (1800mm) stainless flexible hose	2: Diaphragm valve with 72" (1800mm) stainless flexible hose				
	5: 0-200 PSIG (0-14 BAR)	3: Manifold connector*	3: Manifold connector*			available.	
		*See pages 54-55 for manifold ordering information					

Related Options					
Option	Order Number	Description			
Remote alarm	Advantium Series	Provides audible and visible notification of a depleted supply bank to a remote location (See pgs. 68-71)			
Vent manifold kit	52L Series	Wall-mounted manifold designed to equalize liquid cylinder head pressure			
Switchover station	518 1625	Safely mount and secure any switchover and 2 cylinders			
AutoSwitch floor stand	830 7439	Support IntelliSwitch enclosure			
Manifold floor stand	830 7437	Supports two standard length 12" (304.8mm) manifold extensions installed consecutively			