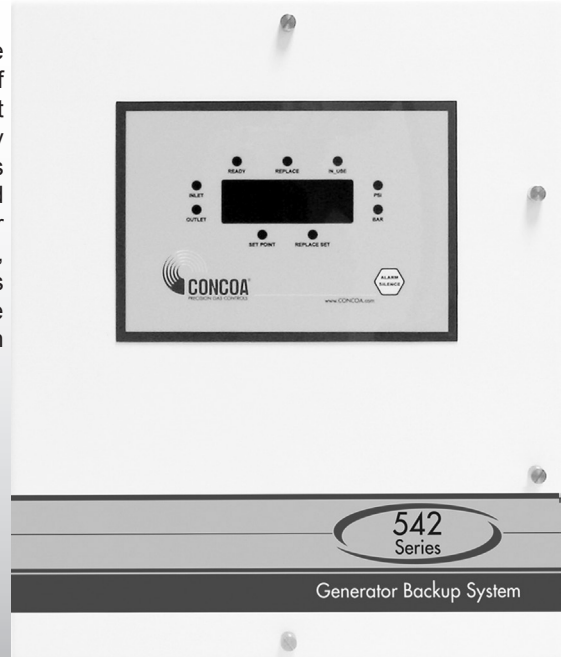




# 542 SERIES

## High Flow Backup

The 542 Series High Flow Back-Up is designed to provide a "smart" reserve supply to high flow gas generators or bulk supply systems. If there is a loss of power, or if the gas generator or bulk supply system cannot provide sufficient gas, the 542 Series will automatically activate the reserve supply to supply gas without interruption. The unique feature of the 542 is that these functions are controlled by an on board micro-processor. In addition to the on board systems, the 542 is equipped with CONCOA's new I-Link™ Web server technology allowing for remote monitoring and control functions. Together, these advanced systems continually monitor pipeline pressure and reserves and can be programmed to engage at a specific pressure. The 542 is available for nitrogen, air, helium, carbon dioxide, nitrous oxide, oxygen, or argon in high purity barstock brass construction.



### Typical Applications

- Bulk or microbulk backup supply
- Air, Nitrogen, or Oxygen generator backup
- Gas chromatograph, flame ionization detector, and mass spectrometer backup
- Critical laboratory gas reserve
- Incubator CO<sub>2</sub> backup supply

### Features

#### Programmable Reserve Activation Pressure

User sets the pressure at which the backup engages

#### Programmable Reserve Low Alarm Pressure

User sets the low reserve alarm point

#### On Board I-Link™ Web Server and Remote Monitoring Software

Enables for real-time online system monitoring

#### High Purity Components

Use in high purity systems

#### High Flow Capacity

High flow building or facility systems

#### Check Valves on Both Generator and Reserve

Prevents back flow to the generator or reserve cylinder

### Materials

#### Regulator Body

Brass barstock

#### Bonnet

Chrome-plated die-cast zinc

#### Seat

PCTFE

#### Filter

Patented 40 micron 316 mesh

#### Diaphragms and Pigtaills

316L stainless steel

#### CGA Connections

Brass with check valve

#### Check Valve Seat

PTFE or Viton®

#### Enclosure

NEMA 12 Powder coated steel

### Specifications

#### Maximum Primary Inlet Pressure

0-120 PSIG (0-8 BAR)

0-250 PSIG (0-17 BAR)

#### Temperature Range

0°F to 140°F (-18°C to 60°C)

#### Pressure Display

Large digital display

#### Status Display

Multi-color LEDs

#### Helium Leak Integrity

1 x 10<sup>-8</sup> scc/sec

#### Adjustable Pressure Range

50-250 PSIG (3.5-17 BAR)

#### Cv

1.0

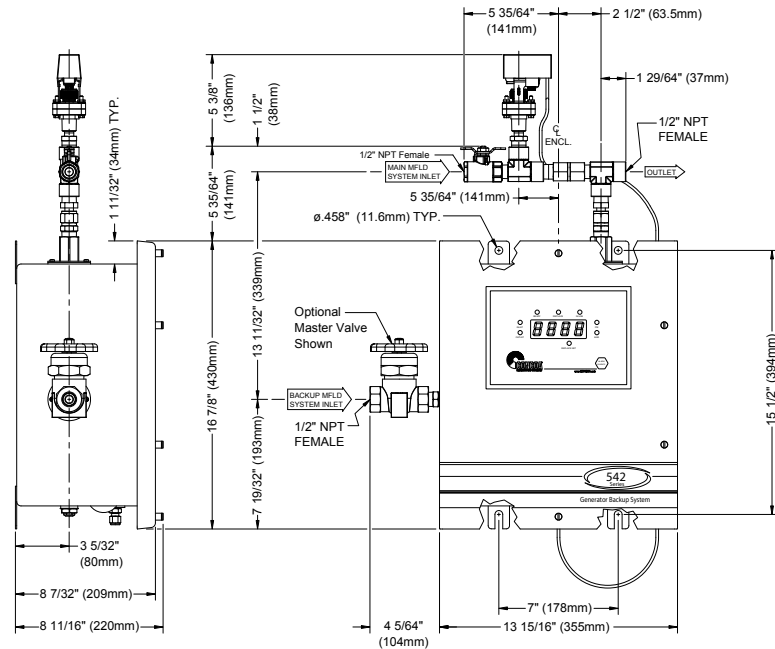
#### Weight

45 lbs. (20.45 kg)

# IntelliSwitch Systems



## Installation Dimensions



## Ordering Information

542	A	B	C	D	-CON	Stations
Series 542	Delivery Pressure	Inlet Options	Internal Buzzer Audible Alarm	Voltage/Web Server Assembly Options	Gas Service Cylinder Connections	
	<b>3:</b> 0-120 PSIG (0-8 BAR)	<b>0:</b> 1/2" FPT	<b>0:</b> Without alarm	<b>2:</b> 120 VAC / without web server	<b>-000:</b> No cylinder connection	<b>0:</b> No hoses
	<b>5:</b> 0-250 PSIG (0-17 BAR)	<b>1:</b> Master valve 1/2" FPT	<b>1:</b> With alarm	<b>3:</b> 240 VAC / without web server	<b>-296:</b> Oxygen mixture >23.5%	<b>1:</b> 1 station
		<b>2:</b> Micromanifold without hoses		<b>4:</b> 120 VAC / with web server	<b>-320:</b> CO <sub>2</sub>	<b>2:</b> 2 stations
		<b>3:</b> Micromanifold with 36" (900mm) stainless flexible hoses		<b>5:</b> 240 VAC / with web server	<b>-326:</b> N <sub>2</sub> O	<b>3:</b> 3 stations
		<b>4:</b> Micromanifold with 72" (1800mm) stainless flexible hoses			<b>-346:</b> Breathable air	<b>4:</b> 4 stations
		<b>5:</b> Master valve with micromanifold without hoses			<b>-540:</b> Oxygen	<b>5:</b> 5 stations
		<b>6:</b> Master valve with micromanifold with 36" (900mm) stainless flexible hoses			<b>-580:</b> Inert (Argon, Helium, Nitrogen)	<b>6:</b> 6 stations
		<b>7:</b> Master valve with micromanifold with 72" (1800mm) stainless flexible hoses			<b>-590:</b> Synthetic air (dry, zero grade, ultra zero grade)	<b>7:</b> 7 stations
		<b>C:</b> High flow manifold, single row, without hoses			DIN 477 BS 341 and others available	<b>8:</b> 8 stations
		<b>D:</b> High flow manifold, single row, with 36" (900mm) stainless flexible hoses				
		<b>E:</b> High flow manifold, single row, with 72" (1800mm) stainless flexible hoses				
		<b>F:</b> High flow manifold, dual row, without hoses				
		<b>G:</b> High flow manifold, dual row, with 36" (900mm) stainless flexible hoses				
		<b>H:</b> High flow manifold, dual row, with 72" (1800mm) stainless flexible hoses				