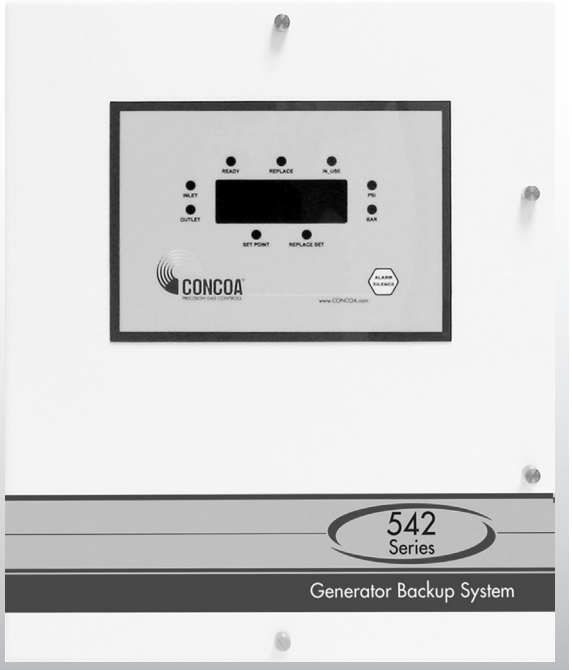
542 SERIES

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 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, or argon in high purity barstock brass construction.



Typical Applications

- Bulk or microbulk backup supply
- Air or Nitrogen generator backup
- Gas chromatography, flame ionization detector, and mass spectrometer backup
- Critical laboratory gas reserve
- Incubator Carbon Dioxide 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
40 micron 316 mesh

Regulator Diaphragm
316L stainless steel

Check Valve Seats
Chloroprene

Enclosure
NEMA 12 Powder coated steel

Specifications

Maximum Primary Inlet Pressure
15-120 PSIG (1-8 BAR)
15-250 PSIG (1-17 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^{-8} scc/sec

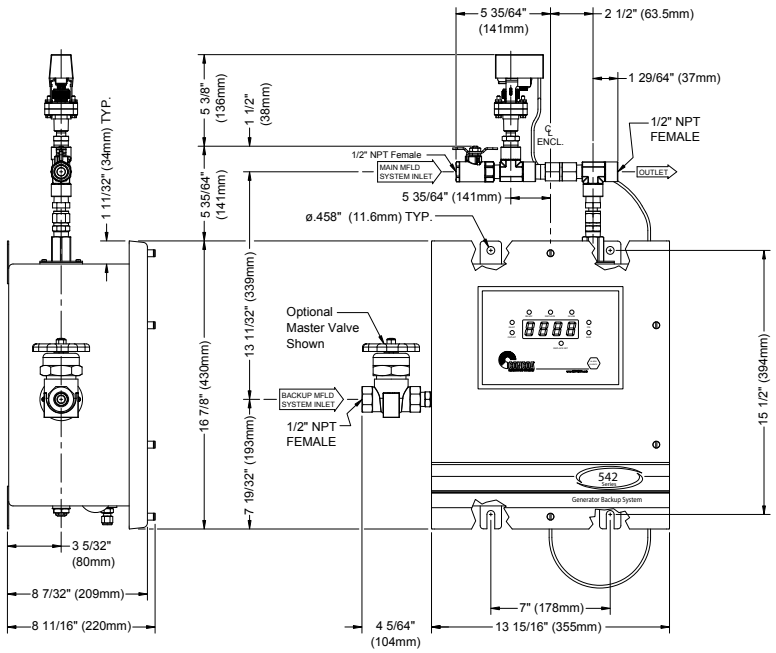
Cv
1.0

Weight
45 lbs. (20.45 kg)

CRN OH17950.5

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	
	3: 0-120 PSIG (0-8 BAR)	**0:** 1/2" FPT	**0:** Without alarm	**4:** 120 VAC / with web server	**-000:** No cylinder connection	**0:** No hoses
	5: 0-250 PSIG (0-17 BAR)	**1:** Master valve 1/2" FPT	**1:** With alarm	**5:** 240 VAC / with web server	**-320:** Carbon Dioxide	**1:** 1 station
		2: MicroManifold without hoses			**-326:** Nitrous Oxide	**2:** 2 stations
		3: MicroManifold with 36" (900mm) stainless flexible hoses			**-346:** Breathable air	**3:** 3 stations
		4: MicroManifold with 72" (1800mm) stainless flexible hoses			**-580:** Inert (Argon, Helium, Nitrogen)	**4:** 4 stations
		5: Master valve with MicroManifold without hoses			**-590:** Synthetic air (dry, zero grade, ultra zero grade)	**5:** 5 stations
		6: Master valve with MicroManifold with 36" (900mm) stainless flexible hoses			DIN 477 BS 341 and others available	**6:** 6 stations
		7: Master valve with MicroManifold with 72" (1800mm) stainless flexible hoses				**7:** 7 stations
		C: High flow manifold, single row, without hoses				**8:** 8 stations
		D: High flow manifold, single row, with 36" (900mm) stainless flexible hoses				
		E: High flow manifold, single row, with 72" (1800mm) stainless flexible hoses				
		F: High flow manifold, dual row, without hoses				
		G: High flow manifold, dual row, with 36" (900mm) stainless flexible hoses				
		H: High flow manifold, dual row, with 72" (1800mm) stainless flexible hoses				