

# Military Series

# HIGH- AND LOW-PRESSURE NITROGEN GENERATOR PRODUCT GUIDE





In addition to our standard military product offering, South-Tek custom engineers systems to support R&D, testing and manufacturing applications at military installations around the world. Select installations include: China Lake in the US Navy, Tinker Air Force Base, Selfridge AFB, Aberdeen Proving Grounds, and US Naval Shipyards at Portsmouth and Pearl Harbor.

With over two decades of experience delivering reliable generators and providing superior customer service, South-Tek has earned a reputation as the nitrogen expert.

# **Self-sustainable Nitrogen Solutions Specifically for the Military**



No More **Deliveries** 



Compact **Footprint** 



Simple Maintenance



Design



**Portable Options** 

### NITROGEN WHERE AND WHEN YOU NEED IT

Access to quality nitrogen gas can be costly and problematic for maintainers tasked with the service and upkeep of critical equipment and instrumentation, particularly in remote locations overseas. The N<sub>o</sub>GEN Military Series economically solves this problem and reliably generates nitrogen on-demand anywhere it is needed.

South-Tek offers stationary models for shops and shelters, as well as fully-deployable, heavy-duty compact systems that go wherever you need nitrogen. Our generators are designed to meet a variety of low- and high-pressure needs.



# HIGH-PRESSURE NITROGEN CYLINDER **FILLING SYSTEMS**

- · Stationary system up to 3000 psig fill pressure
- Deployable system up to 3500 psig fill pressure
- · Service hydro-pneumatic nitrogen filled vehicle and aircraft struts and suspensions
- · Pressurizing firing chambers and recoil systems
- · Fire suppression and fire extinguisher refill
- · JLTV, Stryker, Fire Suppression Refill Station (FSRS), M-777

## LOW-PRESSURE NITROGEN GENERATORS

- Oil-free nitrogen at pressures up to 100 psig and 99% purity
- The perfect solution for maintaining and servicing NVD's and other sensitive electro-optics.
- · Optics purge kit replaces standard purge boxes that require nitrogen cylinders.
- Prescribed for nitrogen purging of the ANVIS per TM 11-5855-313-23&P.









# N<sub>2</sub>GEN HPCD-01D

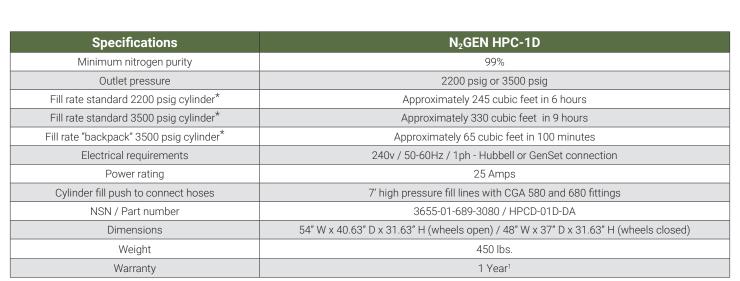
Portable, reliable, and self-contained, the HPC-1D deployable nitrogen generator is designed to provide high-pressure, oil-free nitrogen on demand for a wide range of military applications in field conditions, on flight-lines, and in mobile or fixed shops.

### **DESIGNED FOR:**

- · Filling vehicle and aircraft tires and struts
- · High-pressure, gas suspensions
- · Backpack systems (NBK and similar)
- M777 recoil systems
- Fire suppression refill
- · Cylinder fill for backup supplies
- · Any other high- or low-pressure use

### **FEATURES:**

- · Heavy duty weather-proof case with protectors to shield from water
- · Fully integrated, self-contained system, with twin oil free air compressors, heavy-duty N<sub>2</sub> membrane separator, low pressure N<sub>2</sub> tank, and two stage direct drive booster
- Auto shutoff, inlet/outlet gauges, hour meter
- 9" diameter, high tread rubber wheels with extended handles on opposite end for easy transport across various terrain
- · Fold out, pin lock, wheel assembly that easily folds out of the way for lifting and transport
- · Topside control panel with slanted mount
- · External single bottle rack & strap mounted on back of case
- · Easy removal design of major components for maintenance access
- Top side compartments for storage



Partially filled cylinders will fill to max pressure in fewer hours. Rate is stated at 220v/60hz; fill rate at 50Hz is approximately 18% longer. Per Manufacturer's Terms & Conditions









# N<sub>2</sub>GEN HPCF-K0

The HPCF-K0 series uses PSA filtration technology to deliver high quality, clean, dry nitrogen with low pressure tank, air powered booster, and cylinder fill stand on a compact skid.

### **DESIGNED FOR:**

- · Filling vehicle and aircraft tires and struts
- · High-pressure, gas suspension
- · Backpack systems (NBK and similar)
- M777 recoil systems
- Fire suppression refill
- · Cylinder fill for backup supplies
- · Any other high- or low-pressure use

### **FEATURES:**

- · Built-in, user friendly PLC with 3.5" color touchscreen
- · Auto-off when cylinder fill is complete
- · Manual start/stop capability
- · Attached fill stand with 2, 4 or 6 high pressure leads and stability straps
- Fills alternate size cylinders up to 2200 psig or 3000 psig
- Integrated, low maintenance, air powered N<sub>2</sub> booster
- · Easily connects to external source of required compressed air (not included)



# **OPTIONS:**

- · Custom purity (up to 99.999%) and/or alternate cylinder fill rates
- · Annual filter maintenance kit
- · Complete air compressor package (Continuous supply of clean, dry compressed air is required at 208-230v or 460v. Existing supply of compressed air may be used)
- Booster lube/O-ring kit
- High purity O<sub>2</sub> Analyzer
- · DOT K-type cylinder
- Alternate size cylinder straps (for securing smaller cylinders)
- Connections Kit (piping from air compressor and N<sub>a</sub>GEN)
- · Start-up and commissioning (When included with initial purchase, warranty extended 12 additional months from ship date)

Specifications	HPCF-K02	HPCF-K04	HPCF-K06
Standard N <sub>2</sub> purity	99.9%		
Outlet pressure	2200 psig or 3000 psig		
Cylinder fill rate/24 hours <sup>1</sup>	Two (2)	Four (4)	Six (6)
No. HP filling leads included on skid	Two (2)	Four (4)	Six (6)
Electrical requirements	110-240V / 50-60Hz 1 Phase, <2 OP. Amps	110-240V / 50-60Hz 1 Phase, <2 OP. Amps	110-240V / 50-60Hz 1 Phase, <2 OP. Amps
Compressed air volume required <sup>2</sup>	12 SCFM	21 SCFM	35 SCFM
NSN / Part number	N/A	N/A	3655-01-689-5086 / HPCF-K06-0100-GG
Dimensions	42" W x 32" D x 62.59" H		
Skid Weight	650 lbs.	675 lbs.	695 lbs.
Warranty	1 Year <sup>3</sup>		

<sup>1.</sup> Standard N2 Cylinders at approximately 245 SCF capacity @2200-2400 psig. Partially filled cylinders will fill to max pressure in fewer hours. 2. Compressed air must be dried to 39-45F dewpoint; minimum 100 psig inlet pressure to N2 skid required.

<sup>3.</sup> Per Manufacturer's Terms & Conditions.







N<sub>2</sub>GEN-4

N<sub>2</sub>GEN

**NITROGEN** 

**GENERATOR** 

# N<sub>2</sub>GEN-4

The N<sub>2</sub>GEN-4 system is a low-pressure generator specifically designed to deliver nitrogen used to protect NVD's and optics against moisture during purging and maintenance. The compact design has an on-board air compressor and separate nitrogen storage tank, with quick disconnect for portability. Requiring only a single electrical connection the generator can be wall mounted, installed in mobile shelters, or incorporated into mobile maintenance trailers and containers.

# **DESIGNED FOR:**

- NVD'S
- Sights
- · Electro-optics
- · Weatherproof enclosures
- Filling tires up to 100 psig
- Other low-pressure nitrogen uses

### **FEATURES:**

- · Guarantee 99% nitrogen purity
- · Low-pressure specifically for optics
- Oil-free nitrogen delivery
- · Wall or shelf mount options
- · Quick disconnect on tank
- · Replaces current nitrogen charging purge kits
- · Sustainment and field level platforms available
- Military and commercial air transportable
- US Army/USMC/TM published on MILnet



Specifications	N <sub>2</sub> GEN-4	
Standard N <sub>2</sub> purity	99%+, oil-free, nitrogen delivery	
Outlet pressure	100 psig	
Flow rate	Up to 10 LPM	
Electrical	110V / 60h2 / 1ph (220V optional)	
NSN / Part numbers	#3655-01-556-1083 / N <sub>2</sub> GEN-4-100-SBR-18P	
Nitrogen storage tank size	28 gallons	
Nitrogen storage tank dimensions	17" W x 48" H	
Cabinet dimensions	16" W x 11" D x 32" H	
Cabinet weight	75 lbs.	
Maintenance	Annual (filter kits)	
Warranty	One Year <sup>1</sup>	

<sup>1.</sup> Per South-Tek Systems Terms and Conditions.







# N<sub>2</sub>GEN 4-HC

The  $N_2$ GEN 4-HC nitrogen generator incorporates all of the features, convenience and reliability of our  $N_2$ GEN 4 stationary system but with the added benefit of portability. System integration with the durable, easily transportable case allows for a continuous, on-demand supply of nitrogen in remote locations and in hardship conditions. Originally designed for optics maintenance, the  $N_2$ GEN 4-HC is suitable for any number of low pressure nitrogen gas needs.

# **DESIGNED FOR:**

- NVD'S
- Sights
- · Electro-optics
- · Missile seekers
- Weatherproof enclosures
- Filling tires up to 100 psig
- · Other low-pressure nitrogen uses

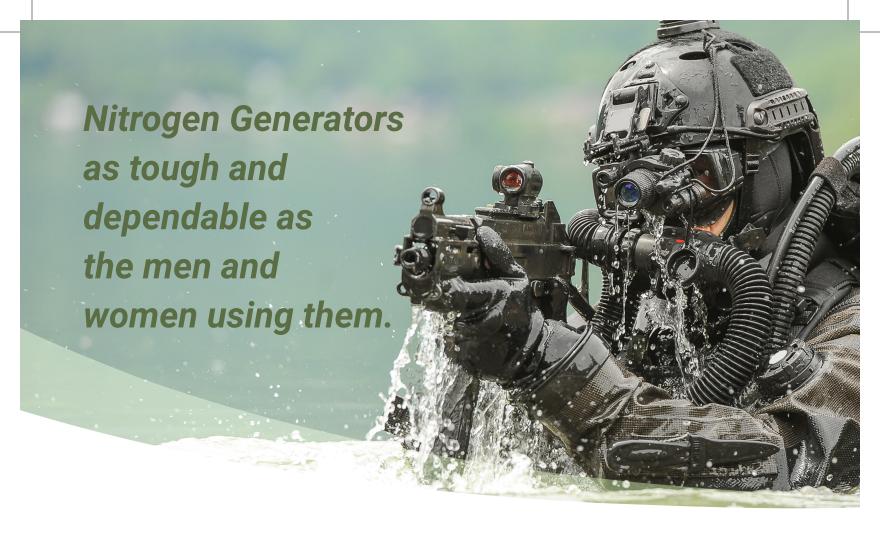
### **FEATURES:**

- · Guarantee 99% nitrogen purity
- · Low-pressure specifically for optics
- Oil-free nitrogen delivery
- · Field condition durability
- · Operates fully protected with case closed
- Integrated 1/2 HP oil-free compressor
- · Optical air purge kit fitting
- Quick disconnect N2 discharge
- · Convenient onboard storage
- Mobile hard case
- Military and commercial air transportable
- US Army / USMC / TM published on MILnet



Specifications	N <sub>2</sub> GEN 4-HC
Standard N <sub>2</sub> purity	99%+, oil-free, nitrogen delivery
Outlet pressure	80 psig
Flow rate	Up to 10 LPM
Nitrogen Storage Tank	5 gallons, inside case
Hard case dimensions (closed)	28" W x 20" D x 52" H (travel orientation)
Total weight	175 lbs.
Electrical	110V / 60 / 1 phase 220V option
Maintenance	Annual (filter kits)
Warranty	One Year <sup>1</sup>

<sup>1.</sup> Per South-Tek Systems Terms and Conditions.



# SOUTH-TEK SYSTEMS NITROGEN GENERATORS: Convenient, Safe, Reliable & Economical

# **NITROGEN EXPERTS**

South-Tek's experienced team of sales and engineering professionals ensure your  $N_2$ GEN system delivers your application's specific nitrogen purity and flow-rate requirements.

### **SERVICE**

Our service team strives for every South-Tek customer to have the best possible experience with their generator. Our certified technicians are available for phone, virtual or on-site troubleshooting. Each generator comes with a 1-year standard warranty.

#### TRAINING PROGRAMS

South-Tek offers in-house, virtual or on-site training to provide the technical know-how to give you the best performance and longest life from your nitrogen generator. Programs consist of didactic and practical skill application sessions on maintenance and operation of our  $N_2$ GEN generators. On-site training includes hands-on demos ensuring maintainers are confident in using and servicing the system.

CONTACT: Email milsales@southteksystems.com or call 888-526-6284

