

ARGON™

World leaders in CBRN/
HazMat training systems

NASCAP

NASCAP (Network Alarm System Central Alarm Processor) was originally designed and is manufactured by Argon Electronics for use with the GID-3 chemical agent detector. It is a man portable, ready-to-go rapid deployment system, enabling the augmented use of stand-alone point detectors. Multiple radio outstations/repeater units are linked to a single flexible architecture base station for safe and efficient monitoring of detector status and enhanced threat reporting.



NASCAP SYSTEM FEATURES

1. BASE STATION RADIO RECEIVER

Communicates with each Outstation attached to individual detectors, relaying received data to PC. The system has a typical range of 1000m (0.6 miles) within a dense urban environment, and 5000m (3 miles) in an open line of sight environment. A repeater capability permits radio range to be extended as desired (see below).

2. RADIO ANTENNAE

5m (16 ft) cable and clip allows placement of antennae for optimum transmission of signal.

3. BASE STATION MAINS POWER CONNECTION

Supplied with local mains power connection as specified by the end user.

4. SCANNER

Used to determine radio frequencies already in local use prior to operation of the system.

5. LAPTOP

When supplied by Argon: semi-rugged removable notebook PC complete with Windows™ operating system and pre-loaded with NASCAP software.

6. LAPTOP MAINS POWER CONNECTION

Supplied with local mains power connection as specified by the end user.

7. USER MANUAL

In English. Translation available at additional cost.

8. RUGGED PELI™ CASES

Two lockable wheeled cases provide secure transit for the complete system (locks not supplied).

9. 6 x OUTSTATIONS (c/w radio aerial)

Outstations are individually attached to deployed chemical agent detectors by means of click-lock webbing band (supplied). They monitor the status of the detector and transmit information on equipment status, agent alarms, equipment fault alarms, location, time and GPS data to the Base Station.

In-built movement sensor to detect unauthorized removal of the outstation from its sited location.

Each Outstation can be reconfigured as a Base Station providing modular replacement and continued system functionality in the event of damage.

Outstations may also function as signal boosting repeaters either whilst in operation with chemical detectors or as separately powered stand alone units.

NASCAP Base Station



NASCAP Outstation Set



NASCAP SYSTEM SPECIFICATIONS

RADIO BASE STATION/OUTSTATIONS

Pre-set frequency(s) to customer's requirement, with user selectable adjacent channels, and user selectable 5 Watt ERP 12.5 KHz channel spacing radio transceiver complete with antenna. Typical frequency 400.00 MHz to 480.00 MHz, with other bands such as 320 to 400 MHz and alternative communications bearers available to special order. High quality GPS position reporting system is able to gain GPS lock within 30 seconds even when placed in an urban environment with limited satellite view. Note: To maintain the facility to obtain a fast GPS lock the NASCAP system requires that the almanac in the system software, relating to satellite positions in the region in which the system is being used, is updated at least every 2 months.

- Power consumption:
Minimized to typically 10% of detector battery life.
- Operating temperature range:
-20°C (-4°F) to +50°C (+122°F).
- Weight (without detector):
1.36kg (3 lbs)
- Dimensions
(incl. rubber mounting blocks, excl. aerial and GPS):
146mm (W) x H 222mm (H) x 69mm (D)
(5.7" (W) x 8.7" (H) x 2.7" (D))



**NASCAP Outstation
mounted on detector**

SCANNER

Multi channel wide-band communication receiver.

LAPTOP

Supplied with minimum specification of Pentium 4™ processor, 1.8GHz CPU, 256MB RAM, 1024 x 768 screen resolution, integrated audio system (for audible alarm), 1 x D sub 9 pin serial com port, 1 x USB (1.1>) port, and Windows™ operating system. Hard drive removable for data security.

SYSTEM CASES

Waterproof mil-spec Peli™ cases, model 1610, are used for both Base Station and Outstation.

- Case dimensions:
625mm (W) x 495mm (H) x 305mm (D)
(24.6" (W) x 19.5" (H) x 12" (D)).
- Base Station weight (when fully loaded):
TBC subject to customer system equipment specification.
- Outstation weight (fully loaded with 6 outstations):
approx. 19 kg (41 lbs).

DETECTORS

The NASCAP system can be used with the GID-3. Variants for other detectors on request.



**NASCAP Radio
Repeater**

NASCAP SYSTEM IN USE

Alarm reporting software with alpha numeric alarm report detailing:

- Identification of class of chemical agent
- Specific agent identification (in place of class) if available from detector.
- Concentration of agent (if available from detector).
- Hazard level of agent in bars.
- Detector fault codes.
- Status of power supply.
- Identity of detector.
- Status of radio nodes.
- Physical location of detector (grid reference or user selected place name).
- Grid reference provided automatically by GPS (manual entry if no lock available).
- Data logging of all alarm conditions with time and date stamp; data retained for record/evidential purposes.
- Software interfaces for reporting systems.

The NASCAP system is fully compatible with NBCWaRN™

(Nuclear, Biological, and Chemical Warning and Reporting Network) software from OptiMetrics, Inc.

Features of this system include

- The same core software used in the next-generation US military JWARN system.
- Fully compliant with the latest NATO standards: ATP-45 (B) & AEP-45 Change 1.
- Support for advanced hazard prediction models HPAC and VLSTrack.
- Network or stand-alone operation.

Please note that NBCWaRN™ is not supplied with the NASCAP system.

The NASCAP system is fully compatible with MIDAS-AT™ (Meteorological Information and Dispersion Assessment System – Anti Terrorism) software from ABS Consulting, Inc. Please note that MIDAS-AT™ is not supplied with the NASCAP system. For details of this and other compatible modeling systems please contact Argon Electronics.

ID	LOCATION	LIVE	STATUS	ALARMS	CLEAR	CONFIG
1	Outstation 1	+	+		CLEAR	CONFIG
2	Outstation 2	+	+	3 Bars of Agent2	CLEAR	CONFIG
3	Outstation 3	+	+	4 Bars of Agent2	CLEAR	CONFIG
4	Outstation 4	+	+		CLEAR	CONFIG
5	Outstation 5	+	+	Main	CLEAR	CONFIG
6	Outstation 6	+	+		CLEAR	CONFIG
7	Outstation 7	+	+		CLEAR	CONFIG
8	Outstation 8	+	+		CLEAR	CONFIG
9	Outstation 9	+	+		CLEAR	CONFIG
10	Outstation 10	+	+		CLEAR	CONFIG
11	Outstation 11	+	+		CLEAR	CONFIG
12	Outstation 12	+	+		CLEAR	CONFIG
13	Outstation 13	+	+		CLEAR	CONFIG
14	Outstation 14	+	+		CLEAR	CONFIG
15	Outstation 15	+	+		CLEAR	CONFIG
16	Outstation 16 Location	+	+		CLEAR	CONFIG
17	Outstation 17 Location	+	+		CLEAR	CONFIG
18	Outstation 18 Location	+	+		CLEAR	CONFIG
19	Outstation 19 Location	+	+		CLEAR	CONFIG
20	Outstation 20 Location	+	+		CLEAR	CONFIG

NASCAP system display screen for multiple outstation reporting

Argon Electronics (UK) Ltd.,

Unit 16, Ribocon Way,
Progress Business Park,
Luton, Beds.
LU4 9UR U.K.

T: +44 (0)1582 491616
F: +44 (0)1582 492780
E: sales@argonelectronics.com
www.argonelectronics.com