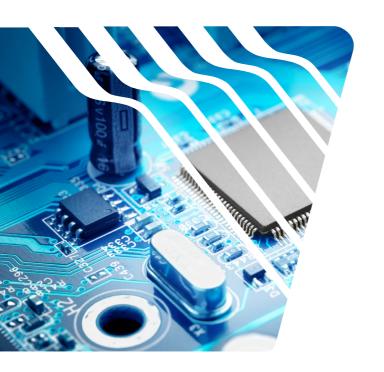
i-FLOW Nitrogen Solutions for

Electronic Component Assembly







Electronic Assembly

Why Nitrogen

High purity Nitrogen gas is inert, electrically non-conducting and is cleaner than most filtered, dried air. It has an extremely low dewpoint, maintains atmospheric consistency and prevent oxidation or moisture penetration. These factors make nitrogen gas the atmosphere of choice for the assembly and storage of electronic components.

Selective Soldering

- Used for 'through hole' PCB assembly
- Minimises oxidation
- More critical for lead-free solder
- Reduces surface tension of solder
- Eliminates 'bridging'
- Significant reduction in dross formation



Reflow Soldering

- Used for Surface Mount Technology (SMT)
- Solder paste temporarily fixes components to PCB
- Controlled heat in reflow oven melts solder
- N2 gas minimises oxidation of surfaces to be soldered



Wave Soldering

- Large scale process
- Uses 'waves' of molten metal to fix component to PCB
- N2 gas minimises oxidation of surfaces to be soldered

Electronic Assembly

Benefits of Nitrogen in the soldering process...

Prevents oxidation and moisture penetration

Improves integrity and reliability of soldered joints

Increased production with fewer product defects

Why i-Flow....

Peak Industrial understands the importance of reliability and value for money. We know that downtime equates with revenue loss. That is why we have created the i-Flow range of industrial gas generators. Every generator is hand built and performance tested in our factory in Scotland to fit into new or existing working environments. i-Flow eradicates the uncertainties associated with bulk or liquid gas supplies.

i-Flow brings customer focussed, solution-based benefits to Nitrogen gas users in the electronics industry.

Service - Industry leading technical support from our worldwide distributor network



Electronic Assembly

i-Flow 6000 Modular Nitrogen Generator...

i-Flow modular gas generators provide the flexibility to expand in line with your business needs by increasing Nitrogen production capacity as your business grows. Compact in size, i-Flow enables you to make the best use of limited production space. Highly efficient, i-Flow provides on-demand Nitrogen gas with purities from 95% to 99.999% and flow-rates between 2Nm3/hr and 115Nm3/hr as standard. Higher capacities are available on request. i-Flow is the reliable, convenient, cost effective and safe alternative to other bulk gas supplies.

Cost Saving -

Innovative Eco-mode ensures the lowest possible running costs by efficiently managing compressed air production to meet Nitrogen demand.

Flexibility to Expand -

Our systems are modular which means we can grow with your business needs.

Industry Experience -

Peak has extensive experience in tailoring products to meet bespoke requirements. Whatever your needs we will try to assist you.



Space Saving -

Much smaller than bulk LN2 tanks and does not compromise valuable workspace.

Environmentally Friendly - No more deliveries, Energy efficient and has an economy mode.



Technical Specifications

Model	Height		Width		Depth		Weight	
Model	mm	In	mm	In	mm	In	kg	lb
i-Flow 6010	1738	68.42	500	19.68	760	29.92	197	433
i-Flow 6020	1738	68.42	500	19.68	920	36.22	282	620
i-Flow 6030	1738	68.42	500	19.68	1080	42.52	367	807
i-Flow 6040	1738	68.42	500	19.68	1240	48.82	452	994
i-Flow 6050	1738	68.42	500	19.68	1400	55.12	537	1181
i-Flow 6060	1738	68.42	500	19.68	1560	61.42	622	1368



The **i-Flow 6000** generator is the best solution for your gas needs. It outperforms traditional means of supply such as cylinders and bulk storage.





Model		99.999%	99.990%	99.950%	99.900%	99.500%	99.000%	98.000%	97.000%	96.000%	95.000%
		10ppm	100ppm	500ppm	1,000ppm	5,000ppm	10,000ppm	20,000ppm	30,000ppm	40,000ppm	50,000ppm
i-Flow 6010	Nm³/hr	2.1	3.2	4.5	5.3	8.1	10.7	13.6	16.5	18.8	21
	scfm	1.2	1.9	2.6	3.1	4.8	6.3	8	9.7	11.1	12.4
	L/min	35	54	75	88	135	178	226	275	313	350
	Air : N2	10.8	7.2	3.4	3.3	2.7	2.6	2.3	2.2	2.1	2
i-Flow 6020	Nm³/hr	4	6.2	8.6	10.1	15.4	20.3	25.8	31.3	35.6	39.8
	scfm	2.4	3.6	5	5.9	9	11.9	15.2	18.4	21	23.4
	L/min	67	103	143	168.4	256	338	430	522	594	664
	Air : N2	10.8	7.2	3.4	3.3	2.7	2.6	2.3	2.2	2.1	2
i-Flow 6030	Nm³/hr	6.1	9.4	13.1	15.4	23.5	30.9	39.4	47.8	54.4	60.8
	scfm	3.6	5.5	7.7	9	13.8	18.2	23.2	28.1	32	35.8
	L/min	102	157	218	256	391	515	656	796	906	1014
	Air : N2	10.8	7.2	3.4	3.3	2.7	2.6	2.3	2.2	2.1	2
i-Flow 6040	Nm³/hr	8.2	12.9	17.6	18.6	30.9	41.1	52.8	64.5	72	81
	scfm	4.8	7.6	10.4	10.9	18.2	24.2	31.1	38	42.4	47.7
	L/min	137	215	294	310	515	685	880	1075	1200	1350
	Air : N2	10.8	7.2	3.4	3.3	2.7	2.6	2.3	2.2	2.1	2
i-Flow 6050	Nm³/hr	9.5	14.6	20.3	23.9	36.4	47.9	61	74.1	84.4	94.4
	scfm	5.6	8.6	11.9	14.1	21.4	28.2	35.9	43.6	49.7	55.5
	L/min	158	243	338	398	607	799	1017	1235	1406	1573
	Air : N2	10.8	7.2	3.4	3.3	2.7	2.6	2.3	2.2	2.1	2
i-Flow 6060	Nm³/hr	11.6	17.8	24.6	29.2	44.5	58.6	74.6	90.6	103.1	115.4
	scfm	6.8	10.5	14.5	17.2	26.2	34.5	43.9	53.3	60.7	67.9
	L/min	193	297	410	486	742	977	1244	1510	1719	1923
	Air : N2	10.8	7.2	3.4	3.3	2.7	2.6	2.3	2.2	2.1	2

Other Nitrogen uses for Electronics Industry



De-ionized Water Storage ...

- Nitrogen is used to blanket bulk storage of the water
- Preserves the quality of the water
- Helps prevent penetration of airborne bacteria

Burn-in Ovens ...

- Higher speed burn-ins at higher temperatures
- Removes unwanted oxidation of pins, boards and sockets

Storage & Dry Cabinets ...

- Preventing moisture pick-up and metal oxidation
- · Cleaner than most filtered, dried air
- Low dew point, inert, clean, atmospheric consistency

Integrated Circuit Packaging ...

- Stops moisture absorption into the package
- Prevents loss of adhesion and 'popcorn' effect of swelling and cracking







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