



# The new

## « Modular Alliance » Gas Generators

FOR GC INSTRUMENTS!



### UNBELIEVABLE!

WE MAKE THEM JUGGLE...  
THEN WE SAVE SPACE AND REPLACE  
"UGLY-LOOKING" INSTRUMENTS  
BY FASHIONABLE DESIGN

Customers choose F-DGSi as their partner for Analytical gas systems, because, simply, we know labs.

The lab is a unique environment demanding reliability, safety, accuracy and more functionality in control.

The "Modular Alliance" Gas Generators incorporates the latest technologies available, in a sleek and appealing design in order to grow with your lab.

**ALLIANCE**, the partnership that keeps the gas flowing.





## STANDARD OR HIGH PURITY GAS GENERATORS

F-DGSI WILL PROPOSE YOU THE RIGHT MODEL FOLLOWING THE 'LIMIT OF DETECTION' YOU ARE LOOKING FOR IN YOUR GC RESULTS.

AT THE LOWER EXTREMES OF DETECTION ACCURATE RESULTANT CAN ONLY BE OBTAINED WITH THE LOWEST POSSIBLE BASELINE. CREATING SUCH A BASELINE REQUIRES THE USE OF ULTRA PURE GASES.

THIS IS WHY F-DGSI OFFERS A STANDARD ANALYSIS GAS GENERATOR AS WELL AS A HIGH PURITY ANALYSIS GAS GENERATOR SOLUTION.

### HIGH PURITY HYDROGEN SERIE WM-H<sub>2</sub> / SENSITIVE ANALYSIS SOLUTION

Hydrogen purity	> 99.99999 %
O <sub>2</sub> content/ Moisture content	< 0.1 ppm / H <sub>2</sub> O < -70°C
Flow rate ml/Min	120,180, 260, 400, 500, 650, 800, 900, 1200
Delivery pressure	12 bar maxi
Water purity requirements	< 0.1 µS-cm Conductivity
Electrical requirement	100-240 V / 150 W to 550 W depends of the model
Dimensions (W x H x D) cm	30 x 43 x 43

- Suitable for Carrier Gas and Flame Gas at low detection limits
- Proven PEM Technology to generate Hydrogen safely and reliably
- Auto drying dessicant columns to ensure highest level of purity
- Automatic water refill as standard
- Maintenance limited to replacing water filter
- Small and stackable
- Creates Hydrogen on demand, minimal storage of Hydrogen in the system
- Internal/external leak detection with automatic shutdown features
- Cascading option to combine multiple units for higher flow requirements
- USB port in series to remote the system anywhere in the world
- Hydrogen sensor available as option to work in safety mode when using H<sub>2</sub> as carrier gas



*The new « Modular Alliance »*



## HYDROGEN SERIE ND-H<sub>2</sub> / STANDARD ANALYSIS SOLUTION

Hydrogen purity	> 99.9995 %
O <sub>2</sub> content/ Moisture content	< 1 ppm / H <sub>2</sub> O < -55°C
Flow rate ml/Min	120, 180, 260, 400, 500
Delivery pressure	10 bar maxi
Water purity requirements	< 0.1 µS-cm Conductivity
Electrical requirement	100-240 V / 150 W to 550 W depends of the model
Dimensions (W x H x D) cm	30 x 43 x 43

- Suitable for Carrier Gas and Flame Gas at standard detection limits
- Proven PEM Technology to generate Hydrogen safely and reliably
- Desiccant Dryers to ensure high level of purity
- Automatic water refill as standard
- Maintenance limited to replacing water filter and desiccant sieve
- Small and stackable
- Creates Hydrogen on demand, minimal storage of Hydrogen in the system
- Internal/external leak detection with automatic shutdown features
- Cascading option to combine multiple units for higher flow requirements
- USB port in series to remote the system anywhere in the world
- Hydrogen sensor available as option to work in safety mode when using H<sub>2</sub> as carrier gas



## ZERO NITROGEN SERIE ZN<sub>2</sub>-HP / SENSITIVE ANALYSIS SOLUTION

Nitrogen purity	> 99.9995 %
O <sub>2</sub> content/ N <sub>2</sub> dewpoint	< 5 ppm / H <sub>2</sub> O < -45°C
CH <sub>4</sub> content	< 0.05 ppm
Flow rate ml/Min max	600 ml/min
Delivery pressure	6 bar maxi
Inlet air requirements	7 bar, clean and dry air from an external air compressor
Electrical requirement	100-240 V / 50 W
Dimensions (W x H x D) cm	30 x 47 x 43

- Suitable for Carrier Gas and Make Up Gas at low detection limits
- Generates Zero Nitrogen on demand from external compressed air
- Regenerative CMS columns remove Oxygen and moisture
- Catalyst chamber to remove Hydrocarbons (as methane) to <0.05ppm
- smart control of the inlet air flow, it is function of the real nitrogen flow used
- Ultra fast start-up time
- Minimum maintenance with an annual filter change
- USB port in series to remote the system anywhere in the world
- Small and stackable



**Gas Generators for GC instruments!**

## NITROGEN SERIE N2-HP / STANDARD ANALYSIS SOLUTION

Nitrogen purity	> 99.9995 %
O2 content/ N2 dewpoint	< 5 ppm / H2O < -45°C
Flow rate ml/Min max	1000 ml/min
Delivery pressure	6 bar maxi
Inlet air requirements	7 bar, clean and dry air from an external air compressor
Electrical requirement	100-240 V / 50 W
Dimensions (W x H x D) cm	30 x 47 x 43

- Suitable for Carrier Gas and Make Up Gas at standard detection limits
- Generates Nitrogen on demand from external compressed air
- Regenerative CMS columns remove Oxygen and moisture
- Smart control of the inlet air flow, it is function of the real nitrogen flow used
- Ultra fast start-up time
- Minimum maintenance with an annual filter change
- USB port in series to remote the system anywhere in the world
- Small and stackable



## ZERO AIR SERIE ZA / SENSITIVE AND STANDARD ANALYSIS SOLUTION

Hydrocarbon content (as methane)	< 0.05 ppm
particles	< 0.01 micron
Flow rate ml/Min	1,5 L/min ; 3 L/min ; 6 L/min
Delivery pressure	6 bar maxi
Inlet air requirements	Clean and dry air from an external air compressor
Electrical requirement	100-240 V / 100 W
Dimensions (W x H x D) cm	34 x 20 x 43

- Generates Zero Air on demand from clean and dry external compressed air
- Catalyst chamber to remove Hydrocarbons (as methane) to <0.05ppm
- Minimum maintenance with an annual filter change
- Small and stackable



## COMPRESSED AIR

- F-DGSi propose suitable oil free air compressor for a variety of "Modular Alliance" Generator combinations
- Minimal noise emission due to insulated compressor compartment
- Minimal vibration through especially developed compressor anti-vibration mounts
- Compressor service indication-

***H2, N2, Zero Air Generators***



# F-DGSi EXPERTISE IS DEFINED BY ALWAYS OUR ONE STEP AHEAD!

WE DESIGN A NEW MODULAR SOLUTION THAT CAN FULFILL THE NEEDS OF ANY GC LABORATORY'S NEEDS.

THIS NEW SOLUTION ALLOWS YOU TO ADD MULTIPLE GENERATORS AS YOUR GAS AND ANALYSIS DEMANDS CHANGE.

## WHY" MODULAR ALLIANCE"?

- Modular system offering a GC gas supply solution specific to your lab
- Stackable design allowing you to save space in the lab
- Combinations available for single and Multiple GC applications
- Very low maintenance throughout the range without opening any covers
- Touch screen display showing the status of the system with auto-diagnostics in case of alarms
- PEM technology with double gas column dryer regeneration for H<sub>2</sub>
- PSA fast purity for UHP Nitrogen
- Unique USB port allowing remote control system for multiples modules

## POSSIBLE COMBINATIONS





**F&DGSi**  
Innovative Gas System Company

## LAB GAS GENERATORS [www.f-dgs.com](http://www.f-dgs.com)

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