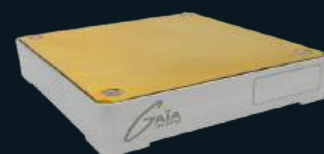




**COTS MODULAR POWER SOLUTIONS
FOR HIGH RELIABILITY AND
INDUSTRIAL APPLICATIONS**



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MODULAR POWER ARCHITECTURES & POWER SOLUTIONS

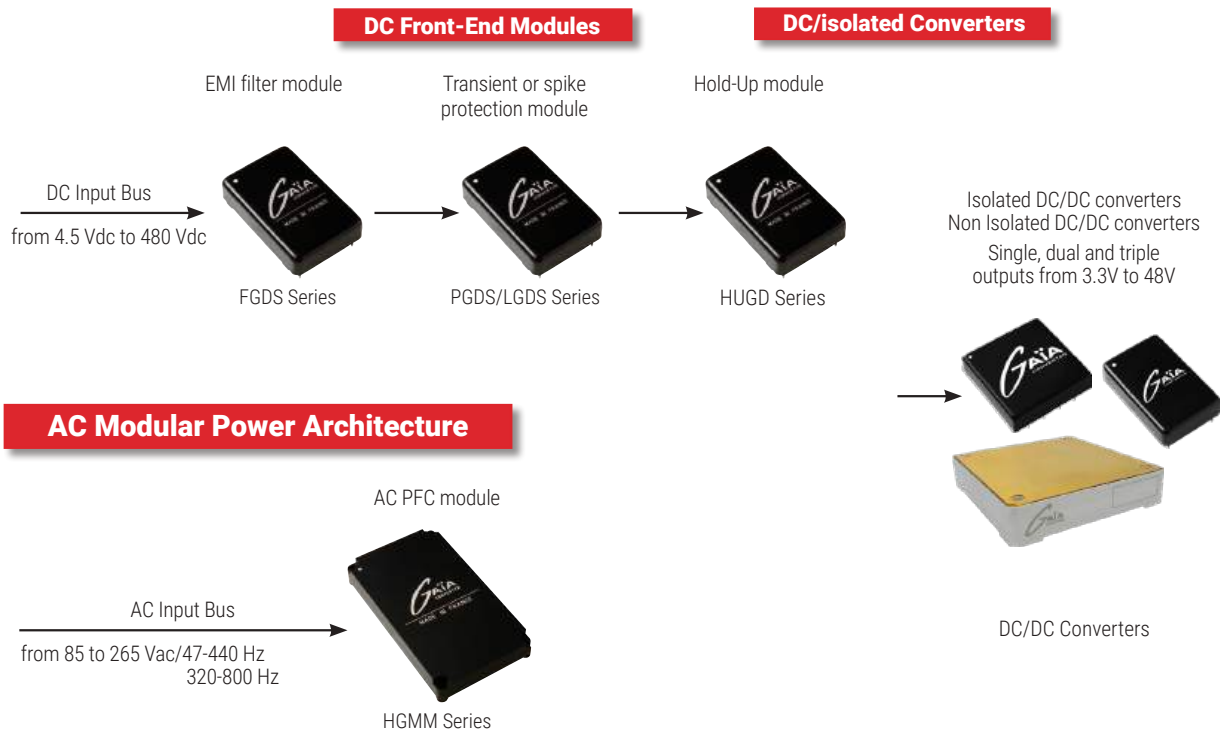
GAïA Converter Modular Power Architecture feeds your exact need with one of the most comprehensive range of DC/DC, AC/DC converters and bus adaptation modules. Whether you need basic power or advanced power management, you will find everything you need with **GAïA Converter** to meet your sophisticated power supply requirements.

This “building block” approach using COTS (commercial-off-the-shelf) products provides unprecedented advantages to ease design, simplify qualification and reduce time to market.

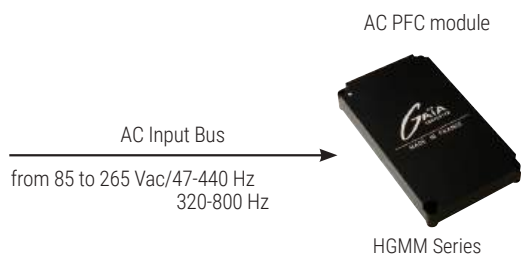
GAïA Converter also offers integrated power solutions under various forms : enclosed pack (G-Pack) or single rail board (Grd) and board mount modules (PSDG).

Modular Power Architecture

DC Modular Power Architecture



AC Modular Power Architecture



Power Solutions





3 PRODUCT LINES 2 PRODUCT GRADES

GAIA Converter offers a complete range of more than 5 000 field proven standard products from a 4 watts up to 500W power. Products are organized in 3 product lines : Front ends, DC/DC converters and power solutions, and 2 product grades : Hi-Rel grade and Industrial grade.

FRONT ENDS

GAIA Converter offers 4 main front end functions to ensure system standard compliance :

- **EMI filters** for MIL-STD-461, DO-160, ... compliance.
- **Holdup and bus conditioners** embed transparency management, reverse polarity protection and inrush current limitation functions for MIL-STD-704, DO-160, ABD-100 compliance.
- **Transient protection modules** protect downstream DC-DC converters against high voltage transients as specified in EN50155, RIA12, MIL-STD-1275, MIL-STD-704, DO-160, DEF-STAN61.5.6, VG96916-5...

GAIA Converter's AC/DC power-factor corrected front-end modules are DO-160, ABD-100, and Mil-Std-704 compliant. They are compatible with common airborne AC input bus voltages and variable frequencies.

DC/DC CONVERTERS

GAIA Converter offers a wide range of high density and low-profile Isolated DC/DC Converters from 4W to 500W in 3 main categories :

- **4 to 100W** highly compact and feature rich with wide input voltage ranges and up to 3 outputs.
- **75 to 500W** high efficiency $\frac{1}{4}$ and $\frac{1}{2}$ brick industry standard packages.
- **Up to 260W** feature rich highly compact non isolated POL module.

These DC-DC converters are dedicated to the most common standard DC input voltages in Avionics and Defense applications such as 14, 24, 28, 155 and 270Vdc to meet worldwide standards. They also include ultra-wide input ranges to cover all railway busses from 12V to 110VDC. Output voltages range from 3.3 to 48V with single dual or triple combinations. Most of these converters offers an unprecedented wide input range to allow usage in multiple bus applications

POWER SOLUTIONS

GAIA Converter recently introduced new DC-DC power solutions from **50 W to 800W. Dedicated to 24 & 28VDC Military and High Reliability applications**, MILSTD-461, MIL-STD-704, MIL-STD-1275, ABD100 and DO160 power supply requirements are built into these systems: EMI filtering, transient protection, reverse polarity, bus interruption management.

Systems have multiple outputs from 3.3 to 48V and include a set of control and monitoring signals to be able to address complete power supply needs for a given application.

Low power systems (50W) come in board mount modules while higher power versions are connectorized and include thermal flange and mechanical housing.

2 PRODUCT GRADES

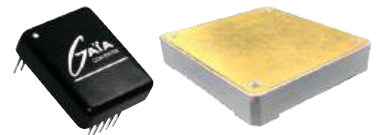
Hi-Rel grade converters are designed for demanding applications in extreme environments such as aerospace, military and high-end industrial applications. The modules are potted with a military qualified thermal conductive compound and packaged in a five sided metallic case.

- Tstorage : -55°C to +125°C
- Encapsulation : Hi-Rel grade qualified potting
- Qualified for avionics/military applications
- Extended control functions
- Stringent electrical tolerances
- High level tests and controls in production.
- Restricted list of qualified suppliers
- Process traceability
- RoHS or leaded process available
- Option for -55°C start-up and MIL-STD-883C screening























Where optimum trade-off between cost and performances is of the essence, **industrial grade** DC/DC converters is the solution of choice. GAIA Converter proposes two classes of modules, one with standard isolation or high/re-inforced isolation.

- Tstorage : -45°C to +105°C
- Encapsulation : Industrial grade potting
- Qualified for industrial grade applications
- Standard tests and controls in production
- Option for high isolation up to 3KVdc and re-inforced isolation
- RoHS only









FRONT END MODULES















































Power/Current	Family	Grade	Standards	Package
EMI FILTERS				
50 W / 2 A	FGDS - 2 A - 50 V	 Hi-Rel Grade	MIL-STD-461, DO-160	Dil 24
150 W / 6 A	FGDS - 6 A - 100 V	 Hi-Rel Grade	MIL-STD-461, DO-160	1" x 0.75"
150 W / 10 A	FGDS - 10 A - 50 V	 Hi-Rel Grade	MIL-STD-461, DO-160	1.6" x 1"
175 W / 12 A	FGDS - 12 A - 100 V	 Hi-Rel Grade	MIL-STD-461, DO-160	1.25" x 1"
300 W / 20 A	FGDS - 20 A - 50 V	 Hi-Rel Grade	MIL-STD-461, DO-160	1.6" x 1"
500 W / 35 A	FGDS - 35 A - 50 V FGDS - 35A - 100 V	 Hi-Rel Grade	MIL-STD-461, DO-160	1.6" x 1"
HOLD UP AND BUS CONDITIONER MODULES				
50 W	HUGD - 50	 Hi-Rel Grade	MIL-STD-704, DO-160	1.6" x 1"
60W	FLHG-60	 Hi-Rel Grade	MIL-STD-704, MIL-STD-461, DO-160	1.6" x 1"
150 W	LHUG - 150	 Hi-Rel Grade	MIL-STD-704, DO-160	1.6" x 1.3"
300 W	HUGD - 300	 Hi-Rel Grade	MIL-STD-704, DO-160	1.6" x 1"
AC / DC POWER FACTOR MODULES				
35 W	HGMB - 35	 Hi-Rel Grade	MIL-STD-704, DO-160	3.25" x 2"
50 W	HGMB-50	 Hi-Rel Grade	MIL-STD-704, DO-160	3.25" x 2"
150 W	HGMS - 150	 Hi-Rel Grade	MIL-STD-704, DO-160	1/2 brick
350 W	HGMS - 350	 Hi-Rel Grade	MIL-STD-704, DO-160	1/2 brick
TRANSIENT PROTECTION MODULES				
50 W	PGDS - 50	 Hi-Rel Grade	MIL-STD-704, MIL-STD-1275	1.6" x 1"
50 W	LGDSI - 50	 Industrial Grade	EN50155, RIA12	1.6" x 1"
75 W	LGDSI - 75	 Industrial Grade	EN50155	1.6" x 1"
100 W	LGDS - 100	 Hi-Rel Grade	MIL-STD-1275, DEF-STAN-61.5.6	1.6" x 1"
300 W	LGDS - 300	 Hi-Rel Grade	MIL-STD-704, MIL-STD-1275	1.6" x 1"
600 W	LGDS - 600	 Hi-Rel Grade	MIL-STD-704, MIL-STD-1275	1.6" x 1"

POWER SOLUTIONS

Power/Current	Family	Grade	Standards	Package
50 W	PSDG-48 NEW	 Hi-Rel Grade	MIL-STD-461, MIL-STD-704, MIL-STD-1275, ABD100, DO-160	3.5" x 2" x 0.4"
120 W	GRD-12 NEW	 Hi-Rel Grade	MIL-STD-704, MIL-STD-1275, MIL-STD-461, DO160, ABD100	6.9" x 4" x 1"
400 W	GRD-40A	 Hi-Rel Grade	MIL-STD-704, MIL-STD-1275	4.5" x 7.1" x 1.1"
800 W	GPACK SERIES	 Hi-Rel Grade	MIL-STD-704, MIL-STD-461, DO-160	7.1" x 4.7" x 2.4"



ISOLATED DC/DC CONVERTER MODULES

Power	Series	Grade	Package	Permanent Input Range	Output
4 - 6 W	MGDM-04 / MGDI-04	 	DIL24	4.5-5.5V, 9-36V, 16-40V / 4.5-5.5V, 9-36V, 36-140V	Single, Bi, Triple
	MGDD-06 / MGDDI-06	 	1" x 0.75"	4.5-33V, 9-60V / 12-160V	Dual
8 - 10 W	MGDM-10 / MGDI-10	 	1.6" x 1"	4.5-5.5V, 9-36V, 16-40V / 4.7-16V, 9-36V, 36-140V	Single, Bi, Triple
	MGDD-08	 	1" x 0.75"	4.5-33V, 9-60V	Dual
15 - 20 W	MGDM-18 / MGDI-18	 	1.6" x 1"	4.5-5.5V, 9-36V, 16-40V / 4.7-16V, 9-36V, 36-140V	Single
	MGDM-20 / MGDI-20	 	2" x 2"	4.5-5.5V, 9-36V, 16-40V / 4.7-16V, 9-36V, 36-140V	Single, Bi, Triple
	MGDD-21 / MGDDI-20	 	1.25" x 1" / 1.6" x 1"	4.5-33V, 9-60V / 12-160V	Dual
25 - 40 W	MGDM-25 / MGDI-25	 	2" x 2"	9-36V, 16-40V / 9-36V, 18-75V	Single, Bi, Triple
	MGDM-26 / MGDI-26	 	2" x 2"	9-36V, 16-40V / 9-36V, 16-40V	Single
	CGDM-30 / CGDI-30	 	3" x 2"	9-36V, 16-40V / 4.7-16V, 9-36V, 36-140V	Up to six outputs
	MGDM-35 / MGDI-35	 	3.25" x 2"	9-36V, 16-75V / 9-36V, 18-75V, 36-140V	Single, Bi, Triple
	MGDD-40 / MGRDI-40 NEW	 	1.6" x 1.3"	4.5-33V, 9-60V / 12-160V	Dual
50 - 60 W	MGDM-60 / MGDI-60	 	3.25" x 2"	14-55V / 14-55V, 36-175V	Single
	MGDD-60 / MGDDI-60	 	3.25" x 2"	12-160V / 12-160V	Dual
75 - 100 W	MGDM-75 / MGDI-75	 	1/4 Brick	9-45V, 16-80V, 155-480V / 9-36V, 18-75V	Single
	MGDD-80 / MGRDI-80 NEW	 	2" x 1.6"	9-60V / 12-160V	Dual
	MGDM-100 / MGDI-100	 	3.25" x 2"	10.7-100V / 14-55V, 36-140V	Single
120 - 160 W	MGDI-124		1/4 Brick	9 - 36 V	Single
	MGDM-150 / MGDI-150	 	1/2 Brick	9-45V, 16-80V, 120-480V / 9-36V, 18-75V	Single
	MGDM-155		1/4 Brick	9-45V, 16-80V, 155-480V	Single
	MGDM-160 / MGDI-164	 	1/4 Brick	/9-36V	Single
200 - 250 W	MGDM-200		2/3 Brick	9-45V, 16-80V	Single
	MGDM-205 / MGDI-204	 	1/4 Brick	9-45V / 9-36V 18-75 Vdc	Single
	MGDM-250 / MGDI-254	 	1/4 Brick	9-45V / 9-36V 16-75Vdc	Single
500 W	MGDM-500 NEW		1/2 Brick	9-36V / 16-70Vdc 90-210V / 16-70Vdc	Single

NON ISOLATED DC/DC POINT OF LOAD MODULES

Power	Series	Grade	Package	Permanent Input Range	Output
260 W 14 A	MPGS-14A		1" x 0.75"	4.75 - 36V	Single



GAÏA Converter was founded in 1993. Since that time the company has developed one of the most comprehensive ranges of **modular power components** in the electronics market place. We are headquartered in the heart of the Aerospace Valley industrial cluster near Bordeaux in **France**.

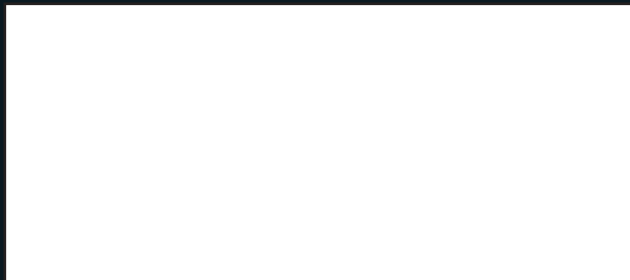
Quality and **long-term commitment** are the hallmarks of **GAÏA Converter**.

Providing **innovative products designed** to support the **entire life cycle** of your program for as long as needed, we excel in product design and management and offer our **full support** every step of the way.

GAÏA Converter brought to the market its now well-established concept of **Modular Power Architecture** simplifying the design of complex power supplies. With more than **5 000 standard power component references** serving the aerospace, military, industrial and transportation markets, **GAÏA Converter** is recognized as one of the world leaders of "power module" solutions.

GAÏA Converter's quality system has continuously followed **ISO 9000 standards** and is **certified to the latest ISO 9001 standard**.

This standard is used as a platform for developing a greater appreciation of the quality required by our customers. Most internal procedures include **AS9100 requirements** to address the **specificity of the aerospace industry**.



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