

# CumulusPower™

**CumulusPower™** is a Swiss made 3-phase, online double-conversion and fully decentralized modular Uninterruptible Power Supply.

From **10kW to 3.6MW** CumulusPower<sup>™</sup> provides the maximum flexibility to adapt to any application. By eliminating any single point of failure, Adding Distributed Active-redundant technology (DARA<sup>™</sup>), preventing human error and reducing the time to maintain and repair, CumulusPower<sup>™</sup> delivers an industry leading Availability of 9 nines to fulfill the needs of the most critical power applications.

# Highest Efficiency

\_\_\_\_

Hot Swappable Modules
Fast Replacement of Intelligent Modules

Proven Reliability
30 years of experience

Distributed Architecture
No Single Point of Failure

### Flexibility to Pay as You Grow

Series of frame sizes

# Unity Power Factor kVA = kW

9 Nines Availability
Zero Downtime

### **Lowest Total Cost of Ownership**

Reduced Component Count Simplifies Maintenance

# Lowest Total Cost of Ownership

#### High Efficiency 97.1% (VFI)

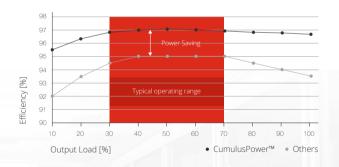
With the best in class efficiency of 97.1% in double conversion mode (VFI), CumulusPower™ provides the lowest Total Cost of Ownership and lowest carbon footprint.

### Maximum Efficiency Management (MEM)

CumulusPower™ incorporates an Intelligent MEM function which matches the number of modules to the load demand by monitoring the level of optimum energy efficiency.

At low load levels, any modules no longer required to maintain redundancy are placed into Active-Sleen

to maintain redundancy are placed into Active-Sleep mode, reducing overall energy consumption.
Active-Sleep modules are instantly online when load increases, maintaining maximum availability at all times.



# >10 years DC capacitor life +"plug-and-play" AC capacitators

- Reduces TCO
- Simplifies maintenance
- Lower cost in spare parts(MTTR) and simplifies routine maintenance.

### Serviceability

Modular design allows fast replacement of Intelligent Modules, reducing Mean Time to Repair (MTTR), maximising availability and reducing costs.





# CumulusPower™









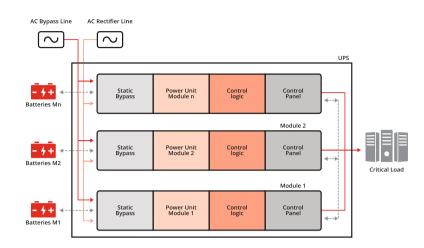
www.centiel.com

www.centiel.com

# The Technology

#### Distributed Active-Redundant Architecture (DARA™)

The architecture of the CumulusPower™ was designed to respond to the highest availability requirements, through the implementation of the system's distributed decision-making in an event of a critical failure, and a correct management of the load sharing. The communication between the Intelligent Modules is accomplished by means of a fully redundant **TripleMode™** communication BUS.



#### IM 10/20/25

#### IM 50/60





#### Flexible Intelligent Module (IM)

Each module is a complete UPS. Thanks to Centiel's long experience in module-design, the CumulusPower™ Intelligent Modules are equipped with three independent power converters, one static bypass, all hardware and all software (intelligence and monitoring) functions, making them fully independent and capable of safely isolating from the multi-module system whenever an internal fault occurs.

## CumulusPower™ IM 10/20/25 UPS with internal batteries

From 10kW to 100kW







Model	CP050-I080-A1	CP050-I240-A0	CP100-I320-B0
Module Type	2 x IM10/IM20/IM25	2 x IM10/IM20/IM25	4 x IM10/IM20/IM25
Max Power	50kW	50kW	100kW
Internal Batteries Capacity	80 x (7/9Ah)	240 x (7/9Ah)	320 x (7/9Ah) or 80 x (28Ah)
H x W x D mm	1,315x510x815	1,980x510x815	1,980x730x815
Footprint	0.41 m <sup>2</sup>	0.41 m <sup>2</sup>	0.59 m <sup>2</sup>

**L** 

# CumulusPower™ IM 10/20/25 UPS for External batteries

From 10kW to 250kW





-			-	ч	9	
	- (3			1	e	
==				0	e	
	(	3	-	0	©	
==	(	Ö		0	e	
				0	©	
==		0		0	e	
==	(	0	-	0	0	
	(	0	***	0	e	
=	(	9	***	0	0	
			(	-	. {	

Model	CP100-E-A1	CP150-E-A0	CP251-E-B0
Module Type	4 x IM10/IM20/IM25	6 x IM10/IM20/IM25	10 x IM10/IM20/IM25
Max Power	100kW	150kW	250kW
Batteries	External	External	External
H x W x D mm	1,315x510x815	1,980x510x815	1,980x730x815
Footprint	0.41 m <sup>2</sup>	0.41 m <sup>2</sup>	0.59 m <sup>2</sup>

# CumulusPower™ IM 10/20/25 19" Universal Rack

From 10kW to 100kW







CAB-UR025-E-CO	CAB-UR050-E-CO	CAB-UR100-E-CO	Battery Shelf KIT
1 x IM10/IM20/IM25	2 x IM10/IM20/IM25	4 x IM10/IM20/IM25	-
External	External	External	1 x 40 (7/9ah)
25 kW	50 kW	100 kW	-
	1 x IM10/IM20/IM25 External	1 x IM10/IM20/IM25 2 x IM10/IM20/IM25  External External	1 x IM10/IM20/IM25 2 x IM10/IM20/IM25 4 x IM10/IM20/IM25  External External External



centiel

# CumulusPower™ IM 50/60 Bottom cable entry

From 50kW to 3.6MW







Model	CP250-E-B0	CP300-E-B0	CP600-E-2B0
Module Type	5 x IM50	5 x IM50/IM60	10 x IM50/IM60
Max Power	250kW	300kW	600kW
Batteries	External	External	External
H x W x D mm	1,980x730x845	1,980x730x845	1,980x1,460x845
Footprint	0.61 m <sup>2</sup>	0.61 m <sup>2</sup>	1.19m²

# CumulusPower™ IM 50/60 Top cable entry

From 50kW to 3.6MW





Model	CP300T-E-B0	CP600T-E-2B0
Module Type	5 x IM50/IM60	10 x IM50/IM60
Max Power	300kW	600kW
Batteries	External	External
H x W x D mm	1,980x730x845	1,980x1,460x845
Footprint	0.61 m <sup>2</sup>	1.19 m <sup>2</sup>