



## DPA UPScale RI 10 – 80 kW

Rack-independent  
Three-phase  
UPS system

➤ The modular  
UPS for  
customised  
solutions.

continuous power  
protection availability



## DPA UPScale RI – the individual UPS.

The rack-independent DPA UPScale RI (rack-independent) is one of the most customisable UPS systems on the market and provides the best technical and commercial solutions to meet individual power protection needs. The three-phase and modular UPS system can be [integrated into any 19" cabinet](#), regardless of the rack's manufacturer.

The multi-purpose DPA UPScale RI simplifies the engineering and deployment of customised power protection solutions. The UPS system allows system integrators to add their own know-how and to implement [individual solutions](#) according to their design requirements.

DPA UPScale RI can be integrated into any weather-resistant enclosure to withstand the demands of the [harsh outdoor environments](#). The rack-independence allows DPA UPScale RI to be used all over the world on oil rigs, ferries and commercial shipping vessels, just to name a few.

In the rack, the warm air is discharged to the back. This allows the warm air to exit the cabinet through the top air path without heating up the whole enclosure. In any case, it is important that system integrators take the air conditioning into account.



## DPA UPScale RI – always protecting your critical load.

The three major concerns of IT managers when assessing the life-cycle cost of their power protection infrastructure are **availability**, **flexibility** and **total cost of ownership (TCO)**. DPA UPScale RI simultaneously addresses all three concerns. DPA UPScale RI is based on Newave's **Decentralised Parallel Architecture (DPA)** that has been developed specifically to respond to stringent life-cycle cost requirements.

**Maximum availability:** Modular systems based on DPA are free of single points of failure. The modular DPA UPScale RI is built of self-contained modules that include the entire UPS hardware and software; hence, it eliminates all the common parts that are potential single points of failure.

**High level of flexibility:** UPS systems based on DPA allow for incremental expansions whilst ensuring redundancy at all times. It is possible to start with just a few modules and add to them as required in an easy and safe way.

**Low total cost of ownership:** DPA UPScale RI boasts the lowest cost of ownership of any UPS system by offering energy efficiency, scalable flexibility and highest availability due to true redundancy and easy serviceability.

### DPA UPScale RI – safe-swap modularity.

The ability to safe-swap modules significantly reduces the system's mean time to repair (MTTR) and simplifies system upgrades. Thanks to the unique, compact design and low weight (10 kW = 18.6 kg, 20 kW = 21.5 kg) of the DPA UPScale RI modules, inserting additional modules or replacing existing ones during operation is easy and can be performed by a single technician.



MODULES	M 10 or M 20
<b>Maximum output power</b>	10 or 20 kW
<b>Weight</b>	18.6 or 21.5 kg
<b>Dimensions</b> W x H x D (mm)	488 x 132 x 540 (3 HU)

# DPA UPScale RI – system architecture.

The core elements consist of best-in-class hardware and software that respond to diverse customer applications and changing business needs. All DPA UPScale RI components can be mounted directly in any 482.6 mm (19") cabinet of 800 or 600 mm (RI 10, RI 20) depth. Depending on the requirements, mixed equipment population is also possible. DPA UPScale RI is available in seven configurations – with or without inbuilt battery blocks.

Product types with batteries	RI 11	RI 12	RI 22	RI 24
<b>Output power max.</b>	20 kW	20 kW	40 kW	40 kW
<b>Number of batteries</b>	40	80	80	160
<b>Dimensions</b> W x H x D (mm)	488 x 487 x 735 (11 HU)	488 x 665 x 735 (15 HU)	488 x 798 x 735 (18 HU)	488 x 1153 x 735 (26 HU)

Product types without batteries	RI 10	RI 20	RI 40
<b>Output power max.</b>	20 kW	40 kW	80 kW
<b>Dimensions</b> W x H x D (mm)	488 x 310 x 565 (7 HU)	488 x 440 x 565 (10 HU)	488 x 800 x 735 (18 HU)

### Highlights for system integrators:

- \_ Rack-independence
- \_ Efficient manufacture of individual solutions with standard products
- \_ High local added value

## Meeting individual needs with serial components.

Our customers count on us to provide solutions that meet the demands of diverse IT environments. The following business cases are examples of DPA UPScale RI's outstanding flexibility.

### Research institute

When a German research institute needed to equip 18 radar towers with new radar scanners and servers for research analysis in the head cabin of the 73-metre-high tower, it turned to Newave. The customers' business-critical technology systems demanded flexible and easy adjustable power support. Due to the fact that the standard product allows a wide range of product variants and can be integrated into any existing 19" rack, the individual requirements were easily fulfilled. The serial components allowed for the efficient manufacturing of the individual solutions, even in view of the limited number of applications.

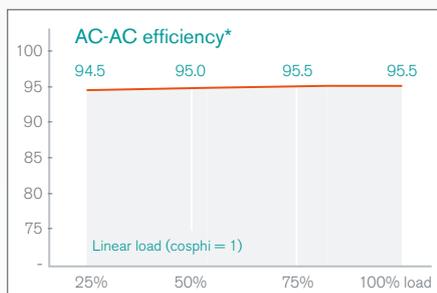
### Transportation

Peru's government is introducing a new transportation system into its country. The changes include the introduction of a fleet of modern gas buses, an advanced controlling system as well as an e-ticketing system providing customer convenience. At the heart of the new control room is DPA UPScale RI, installed to ensure power availability of the operating systems. Additional DPA UPScale RI systems are deployed in locations with limited available space and harsh environmental conditions. Thanks to features such as rack-independence and compact size, individual design requirements were easily fulfilled.

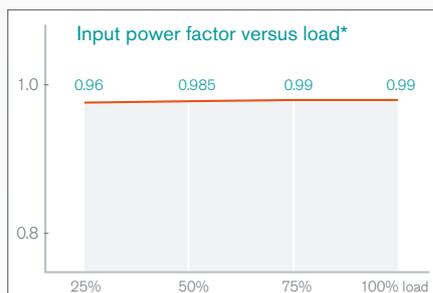


## When you think environment, think Newave.

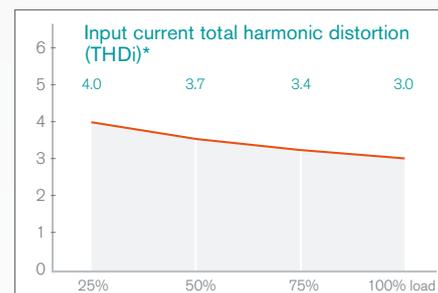
Our power protection solutions help IT professionals execute a comprehensive energy-efficient strategy, drive more performance while creating a smaller energy footprint, and enable them to add new capacity to existing facilities while holding the line on power consumption.



The flat efficiency curve enables significant energy savings in every working condition.



The input power factor of DPA UPScale RI is near unity at partial and full load.



Class-leading THDi of <3% virtually eliminates harmonic distortion of the mains supply.

## Technical specifications.\*

GENERAL DATA	RI 10	RI 11	RI 12	RI 20	RI 22	RI 24	RI 40
<b>UPS modules</b>	1	1	1	2	2	2	4
<b>Maximum number of inbuilt batteries</b>	-	40	80	-	80	160	-
<b>Output power max.</b>	20 kW	20 kW	20 kW	40 kW	40 kW	40 kW	80 kW
<b>Output power factor</b>	1.0						
<b>Topology</b>	True online double conversion						
<b>UPS type</b>	Modular (Decentralised Parallel Architecture)						
<b>Cable entry</b>	Rear access						
INPUT							
<b>Nominal input voltage</b>	3 x 380/220 V + N, 3 x 400/230 V + N, 3 x 415/240 V + N						
<b>Voltage tolerance</b> (Ref. to 3 x 400/230 V)	For loads <100% (-23%, +15%), <80% (-30%, +15%), <60% (-40%, +15%)						
<b>Input distortion THDi</b>	<3% at 100%						
<b>Frequency</b>	35-70 Hz						
<b>Power factor</b>	0.99 at 100% load						
OUTPUT							
<b>Rated output voltage</b>	3 x 380/220 V + N, 3 x 400/230 V + N, 3 x 415/240 V + N						
<b>Voltage distortion</b>	<2%						
<b>Frequency</b>	50 or 60 Hz						
<b>Overload capability</b>	10 min.: 125% or 1 min.: 150%						
<b>Unbalanced load</b>	100% possible						
<b>Crest factor</b>	3 : 1						
EFFICIENCY							
<b>Overall efficiency</b>	Up to 95.5%						
<b>In eco-mode configuration</b>	98%						
COMMUNICATIONS							
<b>LCD display</b>	Yes (per module)						
<b>LEDs</b>	LED for notification and alarm						
<b>Communication ports</b>	USB, RS-232, potential-free contacts						
STANDARDS							
<b>Safety</b>	IEC/EN 62040-1-1, IEC/EN 60950-1						
<b>Electromagnetic compatibility (EMC)</b>	IEC/EN 62040-2, IEC/EN 61000-3-2 IEC/EN 61000-3-3, IEC/EN 61000-6-2						
<b>Performance</b>	IEC/EN 62040-3						
<b>Product certification</b>	CE						
WEIGHT, DIMENSIONS							
<b>Weight</b> (with modules / without batteries)	41.5 kg	61.5 kg	77 kg	68 kg	110 kg	137 kg	132 kg
<b>Dimensions</b> W x H x D (mm)	488 x 310 x 565 (7 HU)	488 x 487 x 735 (11 HU)	488 x 665 x 735 (15 HU)	488 x 440 x 565 (10 HU)	488 x 798 x 735 (18 HU)	488 x 1153 x 735 (26 HU)	488 x 800 x 735 (18 HU)

## About Newave.

### **Newave – Innovation is our culture**

From the outset, Newave has been at the forefront of international innovation in the field of power protection and is considered to be a key trendsetter in its industry. In the mid and late nineties Newave successfully introduced two leading technological UPS concepts: transformer-less and modular UPS systems. Newave has continuously perfected both technologies and implemented all of the best features into its newest generations of UPS.

Innovation is our culture. We provide products, systems and services that meet the needs of our customers as effectively as possible. That's why our researchers and developers are working today on the technologies of tomorrow.

### **Newave – Quality you can trust**

Newave designs and manufactures its products in Switzerland, using the best quality material, attracting the best talent in the marketplace and providing them with the skills they need in order to deliver perfect quality. Newave is living proof that "Swiss made" represents more than a label of origin. Newave customers are buying a product of outstanding quality and reliability.

### **Newave – Environmentally friendly power protection**

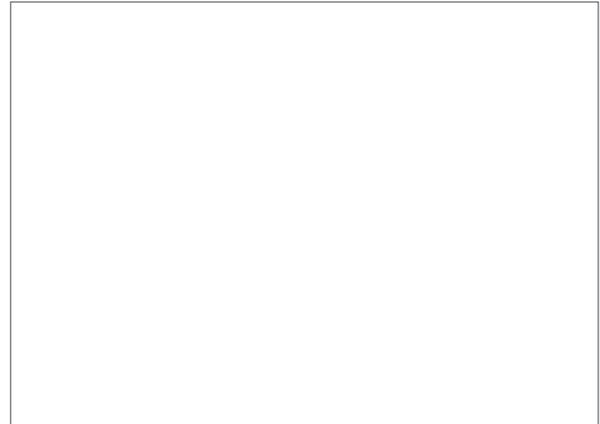
Newave has led the way to sustainable power protection from the outset. Our power protection solutions help IT professionals to execute a comprehensive energy-efficient strategy, increase performance while creating a smaller energy footprint, and enable them to add new capacity to existing facilities without increasing power consumption. We ensure that our customers have access to reliable power supplies and can maximise their industrial productivity and energy efficiency.

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