



# ARMADILLO WHITE

When developing new 3D printing materials and applications, you don't want hardware or software to be the limiting factor. When our founders experienced the restrictions of the tools available on the market, they founded CONCR3DE - and developed their own. Armadillo White is a fully open binder jetting 3D printer that has both customizable hardware, an open material platform and accessible software.

# FOR RESEARCHERS, BY RESEARCHERS

Armadillo White was designed to help material researchers and scientists explore the full potential of additive manufacturing. This modular, accessible platform can use any available CONCR3DE powder or binder - but invites you to create new standards and novel applications. Every single setting, from speed to saturation and from the binder droplet size and shape to UV- or infrared curing options – Armadillo White gives you full control over the 3D printing process and results.



## From prototyping to production

**Reduction Insert (optional)** • The Reduction Insert is an add-on that shrinks the minimum print size. You can start printing with less than 1 liter of powder, reducing your waste, preparation time and costs. Once you progress, simply take it out to print full-scale, all in one versatile printer.

Labjet LFR Binder Supply (optional) • When testing new formulations, you want to start with small batches, with optimal stability and repeatability. The Labjet LFR Binder Supply allows you to apply tiny, measured binder volumes with a syringe. This add-on is excellent for volatile or expensive binders.

**Extra large (optional)** • This XL size upgrade increases the Armadillo printing dimensions to an impressive 440 x 440 x 250 mm. It enables performing research at a larger scale, prototype, and run production on a single printer, without further investments or R&D transfer issues.

### **Unprecedented versatility**

**Integrated NOAH control** • Armadillo White includes an integrated control station with our custom and fully open NOAH R&D software pre-installed on optimized hardware. NOAH R&D offers full access to all parameters of the printing process and controls the add-ons.

UV Curing (optional) • For printing polymer or composite materials, the UV Curing add-on is indispensable. It adds the possibility to cure the material with a 395 nm (+/- 5) light engine with a typical radiation of  $5,5 \text{ W/cm}^2$  and optical output power of 31 W, and UV power of 4,2 W/cm.

Infrared Heater (optional) • Certain powders require high-temperature curing or bind faster at higher temperatures. The Infrared Heater uses a powerful infrared curing lamp and allows you to control the print bed temperature. The Infrared Heater enables heating the print bed up to 80°C.

Other options • Looking for other integrated functionalities? Have a look at our In-Printer Add-On range or contact us if you have other wishes!

Technical specifications	Armadillo White	Armadillo White XL
Print box dimensions	370 x 260 x 250 mm	440 x 440 x 250 mm
Custom print box adjustments	Insert for 500 ml of powder	Insert for 500 ml of powder
Print head precision	400 DPI or 720 DPI	400 DPI or 720 DPI
Layer height	40 – 500 µm	40 – 500 µm
Drop size variability	5 - 200 pL	5 - 200 pL
Powder compatibility	Any	Any
Binder compatibility	Aqueous, solvent, particle filled, phenolic,	Aqueous, solvent, particle filled, phenolic,
	inorganic, UV curing	inorganic, UV curing
Connectivity	Ethernet (cable included)	Ethernet (cable included)
Power requirements	1 x 230 V	1 x 230 V
Dimensions	1.600 x 1.100 x 1.600 mm	2.300 x 1.250 x 1.900 mm
Space requirements	2.400 x 2.000 x 2.200 mm	3.100 x 2.200 x 2.500 mm
Weight	600 kg	650 kg
Connectivity	Ethernet (cable included)	Ethernet (cable included)
Software	NOAH R&D with open access (included)	NOAH R&D with open access (included)





Interested to learn more? Check out www.concr3de.com for more information. Are you ready to discuss your project? Send us an email at info@concr3de.com or call +31 (0)85 0606 171.

#### **CONCR3DE**

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