The Blacksmith Group has unveiled the world’s first compact 3-D printer that can also scan items into digitized models - and it was crowdfunded.

The Blacksmith Genesis allows users to scan any item, then edit the digitized model and print it out in 3-D. The first production run will be shipped out in March to the people who supported the crowdfunding campaign. It is available for pre-order at a cost of $2,200, with flat rate shipping to 70 countries worldwide for another $150. It is housed in a black aluminum casing, weighs 6 kilograms and features a 2-inch LCD display, Wi-Fi, an integrated SD-card reader and a USB connection for instant printing.

The patent-pending rotary platform allows for true 360-degrees scanning, and can print items up
to 6,650 cm³ (about 6.5 liters), twice the size of those printed by other similar-sized 3-D printers in the market. With a fine resolution of 50 micrometers, the reproductions will be twice as detailed compared to other compact 3-D printers. Likewise, scanning of objects with its 5 megapixel camera takes only 6 minutes, twice as fast as other 3D scanners in the market.

Blacksmith Genesis is also the first to feature remote live monitoring and automatic error detection thanks to its in-built camera. This allows users to monitor and control the printing process on their smartphone from anywhere in the world through the Internet.

The device is the brainchild of Blacksmith Group’s founders, Nanyang Technological University engineering graduate Dr. Alex Pui Tze Sian and Fang Kok Boon.

Mark Reilly of Iowa will be the first customer to receive the Blacksmith Genesis.