The world’s first compact 3D printer that can also scan items, creating their digitized models, has been unveiled in the US. The $2,200 device, created in Singapore with the help of a crowdfunding campaign, doesn’t require much knowledge of 3D software.

Blacksmith Group start-up at Nanyang Technological University’s (NTU Singapore) launched the world’s first compact 3D printer-cum-scanner at the American Association Advancement of Science (AAAS) annual meeting in San Jose, California on Saturday.

The all-in-one device, named the Blacksmith Genesis, lets users scan any
item, edit the digitized model on the computer and print it out in 3D. Its production was financed through a successful crowdfunding campaign, that raised $80,000, and its US supporters will be able to get it as early as March.

Blacksmith Genesis is housed in a black aluminium casing with an innovative rotary platform, which allows 360-degrees scanning, unlike other commercial 3D printers. It weighs 6 kilograms and features a 2-inch LCD display, 5 megapixel camera, Wi-Fi, an integrated SD-card reader and a USB connection for instant printing, according to the press-release.

“We designed Blacksmith Genesis with the average hobbyist in mind. Most 3D printers sold on the market now are not really user-friendly as their 3D models and blueprints usually have to be designed from scratch on the computer,” the company’s CEO Fang Kok Boon said.
“However, with our device, 3D printing will be fuss-free as users won’t need to design an original work from scratch as they can just use our Blacksmith Sorcerer 3D software. By scanning any physical item, they can immediately copy and print the item or use the digitised object as a base to form their own 3D object,” he added.

The in-built camera of the device also allows remote live monitoring and automatic error detection. It means that with a smartphone connected to the internet a user can control the printing process, no matter where he is.

NTU Singapore’s Professor Chua Chee Kai, the world’s top scientist in 3D printing, who mentors the company, said “Blacksmith Genesis ... is a great example of how scientists can bring innovations from the lab to the industry and in this case, all the way into consumers’ homes. It has always been my wish that 3D printers will be as common as the inkjet and laser printers now found in many homes and offices.”