

VOICE OF THE CUSTOMER

Bitmain

Having a strategic partner like ABB is a must



— Bitmain's facilities

Bitmain Technologies Holding Company (“Bitmain”) was founded in 2013 and is now the dominant player in supplying application-specific integrated circuits (ASICs) that comprise the heart of blockchain mining computers, or “mining machines.” But the Beijing-based firm is also a leading provider of purpose-built data centers that blockchain miners use. It’s a two-pronged strategy that has worked well thus far, but it isn’t without some major challenges.

“We provide chips, servers and cloud solutions for both blockchain and AI applications,” explains Bitmain Commodity Manager Ms. Zhang.

Bitmain, Inc., the company’s American entity, has been operating in the US for around three years and is focused on building data centers specifically for blockchain mining operations. These facilities are different from other data centers in that they have extremely high asset utilization. The servers run constantly, which makes for large cooling loads. The result is an extremely energy-intensive operation that puts a premium on its power distribution system.

“Our projects are always working on a limited budget and tight timeframe,” explains Ms. Zhang. “Most

Some of the fastest growing segments of the digital economy are businesses devoted to “mining” operations that support cryptocurrencies and other blockchain-enabled technologies. It’s a growing niche that relies on specialized, high-performance computing resources.

times the challenges are price, lead-time and logistics. ABB’s products and service help us to complete our projects on time and within budget.”

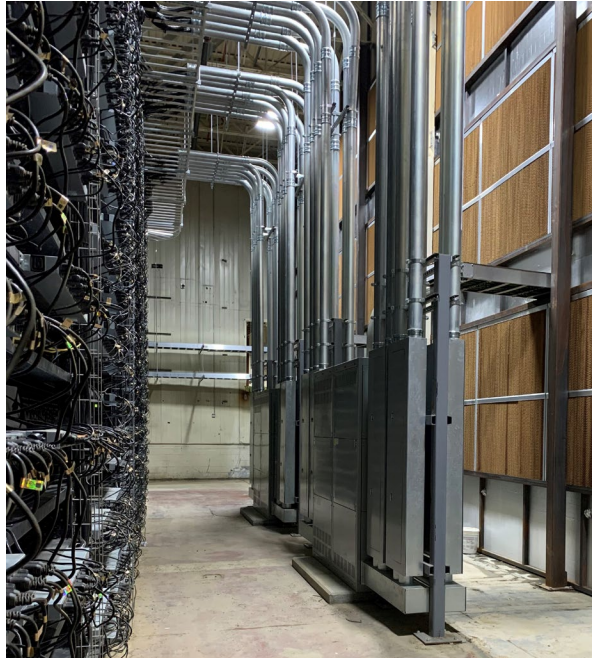
Bitmain works with highly specialized applications, so while the panelboards and switchboards they use are industry standard products, they sometimes need a non-standard solution. For its new data centers in the US, for example, Bitmain worked with ABB engineers to create simplified yet robust panelboard and switchboard designs that were flexible, cost efficient and dependable.

ABB’s A Series lighting panels were one example where the collaboration between engineering and commercial teams worked together to design a panel that was smaller, faster to produce and easier (i.e., less costly) to install. ABB and Bitmain also co-developed a custom transformer design that would meet Bitmain’s stringent requirements.

This level of partnership is important in a highly competitive industry that is seeing a host of new entrants coming into the market.

—
01. A bank of ABB Spectra switchboards and A Series panelboards providing critical power to a large number of Bitmain Carpenter Creek data mining servers.

—
02. Outdoor A series panelboards and LV Spectra switchboards.



—
01

“We’ve had a long history of cooperation with ABB,” she adds. “The ABB team communicates frequently with our managers and engineers—they understand our needs and requirements down to the finest details.”

Currently, Bitmain is working on the second phase of a new facility in Texas and another project in Tennessee, having already completed work on a data center in Washington state.



—
02

Looking ahead, Bitmain is committed to its two-pronged strategy, and is evaluating computing architectures with an eye toward standardizing on either 240v or 120v power. Lead times will continue to be paramount, and for Ms. Zhang, success comes down to partnerships.

“Having a strategic partner like ABB is a must.”

—
ABB Inc.
Electrification Products
305 Gregson Dr.
Cary, NC 27511

electrification.us.abb.com

—
We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

—
We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB AG.
Copyright © 2020 ABB
All rights reserved