EZ Smartbox Blockchain Mining Solutions

Overview

EZ Blockchain specializes in providing blockchain technology services. We consult, design and develop power generating edge data center & smart grid solutions for institutional clients with applications in distributed computing, blockchain and artificial intelligence work. In certain cases, EZ Blockchain can be the operator of your facility depending on the physical location of your “mining farm”, scale and expectations.

Objective

Provide pricing for SBA EDC edge data center solutions

Electrical Considerations

Based on the objectives outlined above, the input power of 415/240V three (3) phase connections (three hot wires (240V in each phase plus one ground wire) is required for each of the EZ Smartbox main breakers. The main power hook up is conveniently located on the outside of the unit for power termination and additional breakers are inside the unit. (see photos included in next pages).

Since EZ Blockchain custom makes the edge data center solutions, we can pre-wire the unit mobile data center to any voltage necessary, for instance, we can make it compatible with 480/277V transformer but this may require the use of different PSUs and may violate your miner’s warranty. EZ Blockchain can design and optimize the whole project as a part of consulting service.

*****Please, do your own due diligence before making any financial decisions and consult with your electrical engineer on choosing the right transformer.***

EZ Smartbox - portable prefabricated mobile data center

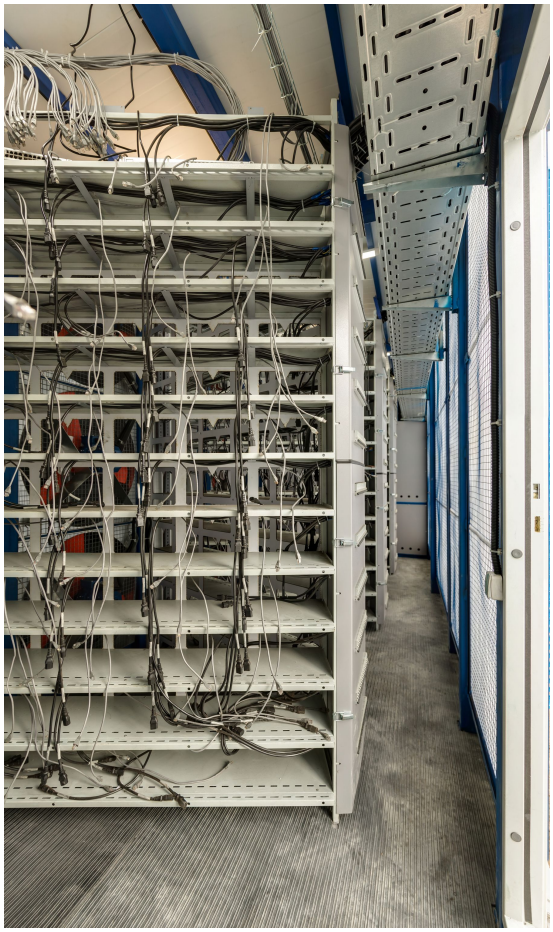
EZ Smartbox or Smartbox is a prefabricated mobile data center used to run computer hardware of different types for blockchain mining, AI training or any other computer-related functions inside it. It is a durable structure built on a steel frame and finished with high-quality heat resistant sandwich panels. There are metal powder-coated shelves inside to safely install computer equipment. The unit is engineered and built to be temperature resistant and lightweight. It includes complete IT infrastructure, power distribution infrastructure with surge protection, environmental monitoring system, a stand-alone cooling system based on HVAC fans.

Note: these photos are for reference only, EZ Smartbox with requested specifications may be similar or vary in design to meet safe and reliable operation.

EZ Smartbox inside infrastructure

Power Supply System

EZ Smartbox Inside electrical infrastructure is protected by high quality circuit breakers. There are at least three layers of surge and heat protections for the equipment inside. Each power outlet is protected by its own individual circuit breaker. EZ Smartbox copper wiring is designed for continuous operation with minimum power losses. Hyundai, ABB & Schneider Electric are the top choices for electrical circuit breakers in a standard Smartbox. Our minimum standard is world's top standard.



Smartbox 2500 rack space delta design

Smartbox 2700 rack with S17+ miners deployed

EZ Smartbox 3.0

Smartbox 2500 air intake side

Smartbox 2500 Electrical room

EZ Smartbox air intake

Smartbox 2500 air intake side with filter doors open

Pleaded filters to increase air intake

EZ Smartbox air intake

Smartbox 2500 HVAC side with fan doors open

SB3000 Specifications

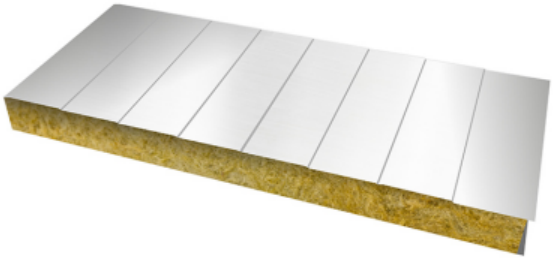
General:	*Specification*
Model	SB3000
Number of installed units with up to 3.9 KW/H power consumption	768*
Connection plug	C19 (C13 splitter cables, optional)
Power Input KW	3000kW
All wiring, equipment racks; Power distribution Units; Cables, Breakers (ABB, Schneider electric or similar), Main Panel Breakers (Schneider electric or similar), lights, electrical outlets.	Included
Dimensions	
Length, Width, Height in feet	40 x 8 x 9.7
Networking	
Routers Firewall built into the router, distribution switches, main computer, monitor, keyboard, mouse	Not Included
Cooling system:	
Automatic exhaust air system with Schneider electric frequency controllers or similar	Included
Industrial grade exhaust fans (4 KW per fan)	18
Air flow up to ft3 per minute	423 000
Air filtering system	Included

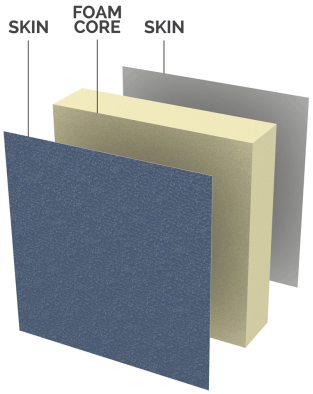
Quantity of miners may be reduced based on the intake ambient temperature. Check the miners' manufacturers specifications to avoid overheating due to high intake ambient temperature.

EZ Smartbox advantages

Materials, heat resistance

EZ Blockchain has a vast experience in crypto mining. We know that temperature management is one of the core factors in Bitcoin mining efficiency. That is why we moved away from retrofitted container products and designed a new Mobile Data Center from scratch using unique materials such as sandwich panels..



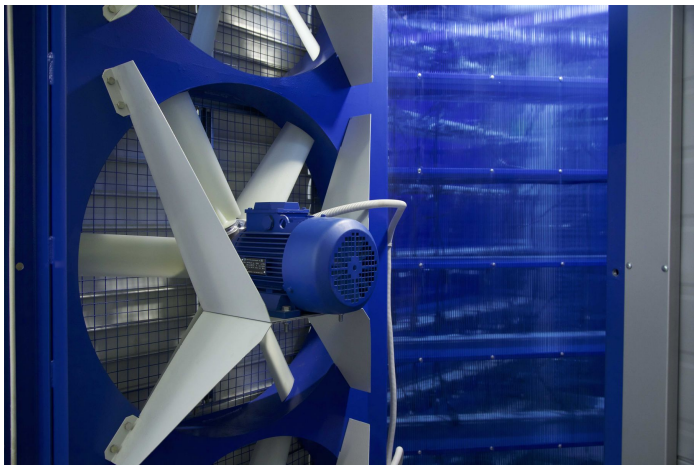


This type of panel consists of fire resistant foam in between multiple layers of aluminum sheets. All of our new Smartboxes are made from Polyurethane Sandwich Panels now. This material has a number of outstanding advantages, such as thermal insulation both in cold and hot environments, weather & water proofing, fire resistance, lightweight and ease of installation.

Electrical components quality

Safety first! We don't only say it, we mean it! EZ Smartbox has a very high density load distributed within the whole mobile data center, to protect expensive equipment and maintain safe environments we use the best available circuit breakers on the market by Schneider Electric. Schneider Electric is a multinational corporation specializing in electrical equipment, which has been around for over 180 years. Their products are consistently ranked as the top electrical components year after year.

EZ Smartbox advantages continued



HVAC fan efficiency

Every Mobile Data Center is equipped with high end efficient HVAC fans. EZ Smartbox fans run very efficiency using only up to 4 KWH per fan. This feature is greatly appreciated especially at high scale mining. All HVAC fans are controlled by Schneider Electric frequency regulators with all data available in a user friendly interface. The fans can be set in a various modes including Auto mode which will increase or decrease fans RPM according to the ambient temperature.

Experience

EZ Blockchain has developed EZ Smartbox for our own mining needs. We have run mobile mining farms in different climate zones for the last 4 years, and have collected enough data and expertise to be able to develop a product which would meet efficiency and safety standards. We have optimized the manufacturing process and supply chain to be able to meet the market demand staying within affordable price range for the quality we provide.

Price

Our pricing strategy is very transparent, we charge per KW all included for a plug & play solution. EZ Smartbox is equipped with all electrical infrastructure, and physical space on the racks to run 3000kW of equipment safely and efficiently. Everything required to start crypto mining is already built in.