

Data Center, Call Center Solutions







# **About 'CRITICAL'**

Was founded in 2011, the activities are in design, supply, installation, repair, service and maintenance of **Mechanical, Electrical and Process (MEP)** utilities works

Today, the group is an unique Engineering Services firm that offers unsurpassed critical facility support, with extensive experience in consulting, project and construction management and services for critical facilities environments. This allows us to extend our expertise and services throughout the region, providing MEP solutions for critical facilities covering the following areas;

- Manufacturing Plants & Factories
- DATA CENTER, CALL CENTER, TOC, NOC, NMC
- Military
- Telecommunication Industries
- Hospitals & Medical Centers
- Laboratories
- Government Buildings & Educational Institutions
- Commercial Building & Complex

Our experience allows us to understand clients' needs to optimize and deliver services to meet our clients' specific needs, standards and requirements, by providing the highest level of professionalism and total customer satisfaction.



# We Strategies Your Critical Services



# THE DATA CENTER

Successful data center design build construction projects require a balance that can only be maintained through a deep understanding of every element, process and requirement of your data center infrastructure.

There's no such thing as a "one-size-fits-all" solution

- Before one piece of equipment is selected,
- Before any topology is chosen,
- Before the floor plan is envisioned,

we listen to your data center requirements, to produce a quality, constructible design that will help you achieve your business goals.

A vendor neutral – meaning we're not tied to any OEM, we select the right design, equipment, and partners for our client's data center projects by putting their interests first.



# THE PROFESSIONAL

Each and every one which involve in the design build construction projects are internationally certified and qualified to carry out their task, to fulfil to the customer expectation, namely;













# THE SOLUTIONS CYCLE

# 1 - POWER AVAILABILITY UPS GENSET

#### 12 - SER`VICE & MAINTENANCE

- PREVENTIVE/COMPREHENSIVE
- **SPARE PARTS**
- RECORDS KEEPING

#### 24X7X365

#### 2 - POWER PROTECTION

- **UPS**
- TVSS

#### **EARTHING**

#### 11 - REMOTE MONITORING

- **WEB BASED SOFTWARE**
- EVENT TRENDING REMOTE ON/OFF
- SMS/EMAIL ALARM ALERTING

#### 10 - SECURITY

- **CARD ACCESS**
- CCTV

#### 9 - FIRE DETECTION

**VESDA** 

# **3 - BATTERY PROTECTION BATTERY MONITORING SYSTEM**

#### 4 - POWER **DISTRIBUTION**

PDU

#### 5 - HEAT REMOVAL

- CRAC
- **ACMV**

## 6 - AIR DISTRIBUTION

- HOT/COLD AISLE CONTAINMENT
- PERFORATED RAISED FLOORING

#### 8 - FIRE SUPPRESSION

- FM200
  - **IG55**

#### 7 - WATER PROTECTION

LEAK DETECTION SYSTEM



# THE PRODUCTS

#### Uninterruptible Power Supply (UPS)

- VFI-SS-111
- VFI Efficiency Up To 96.5%
- Modular/ Scalable Up To 4,800kVA
- Unity Power Factor
- THDi <2%
- Touch Screen Microprocessor Control
- High Level Interfacing

## **Fire Suppression System**

- IG55/ FM200
- Clean Gas/ Green Gas
- VDC/ SIRIM/ FM/ UL Listed
- Pressure Reducing Valve
- Addressable Panel
- Smoke/ Heat Detector

# Computer Room Air Conditioning (CRAC)

- Remote Air Cooled/ Water Cooled/ Chilled Water Cooled/ Dual Cooled
- Capacity Up To 42RT
- Down Flow/ Up Flow/ Horizontal Flow
- EC/VFD Fan
- Touch Screen Microprocessor Controller c/w Temp/ RH Sensor
- High Level Interfacing

## Very Early Smoke Detection Agent (VESDA)

- Laser-Based Absolute Smoke Detection
- Clean air barrier optics protection
- Wide sensitivity range
- Programmable Alarm Thresholds
- Modular Display & programmer design

# **Aisle Containment System**

- Hot/ Cold Aisle Containment
- Preventing 'air short circuits' (mixing of cold & hot air) thereby improving energy efficiency
- Uniform temperature across cabinet height (within containment)
- Increased heat dissipation & better heat management Reduction of operational expenditure (OPEX) Increases Mean Time Between Failure (MTBF) of equipment
- Cost saving solution
- Eliminating hot spots within the aisles

# Water Detection System (WDS)

- Detection Panel
- Sensing Cable
- J-BUS/ SNMP/ Dry Contact

# Battery Monitoring System (BMS)

- Pulsed DC Impedance Testing
- Single Cell Monitoring
- Real Time Monitoring

# **Raised Flooring System**

- Air Distribution
- Cable/ Wiring Path

# **Environment Monitoring System (EMS)**

- Web Base
- 3D Graphic Display
- Event Log
- Data Trending
- SMS/ Email/ SNMP

# Static Transfer Switch (STS)

- Transfer Time <4ms
- 1ph/3ph

# Service, Maintenance & Support

- 34x7x365 Manned Hotline Standby
- Parts & Components Support
- Factory Trained Personnel
- Report Generating



# Regional Offices in Malaysia





#### Sales & Services Offices

PG

6&8 Cangkat Bukit Belah, 11920 Bayan Lepas, Penang, Malaysia T / +604 649 6033 F / +604 649 3033

KI

RK30A, Jalan Villa 3, Anggerik Villa, Off Jalan Semenyih, 43500 Kajang, Selangor D.E., Malaysia T / +603 8723 2033 F / +603 8724 2033

#### Test & Assembly Factory

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