“Make Your Solution Smart, Yet not Expensive”

Data Centre Monitoring & Control

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ABOUT HIOTRON

hIOTron is the leading custom IOT solution provider in APAC [Asia-Pacific] region which provides ready to market IOT enabled products in shortest period of time with 100% customer satisfaction.

We are IOT experts providing End-To-End IOT solutions that improve processes, differentiate products and services, and create new revenue streams.

Currently, Very Few companies have the in-house skills and tools to build IOT solutions quickly and cost-effectively whereas our in-house development team is very much expertise in all the major vertical of IOT technology such as custom PCB design/hardware development, embedded software development, device-cloud/network integration, communication/web protocols & IT experts, front-end/mobile app or Web-App development & big-data analyst.

Starting from 2013, We have covered 8 different IOT business verticals and delivered almost 9700 internet connected devices out of which 84% devices are live on hIOTron IOT Platform in 26 various cities across 4 countries.
OUR EXPERTIZATION

- **Connectivity**: Wi-Fi, ZigBee (Star/Mesh), Z-wave, sub-1, Bluetooth, BLE4.0, IR, NFC, RFID etc.
- **Semiconductor**: Freescale, Marvell, Atmel, TI, Microchip & Many more.
- **Communication Channel**: Wi-Fi, Ethernet, GSM/GPRS, GNSS, LTE.
- **Cloud Platforms**: AWS, IBM Blue-mix Watson, xively, Thing-Worx, hIOTron & Private.
- **Communication & Queuing Protocols**: MQTT, REST, Web-sockets, COAP, XMPP, AMQP.
- **Databases**: Cassandra, MongoDB, Raven DB, MySQL, Oracle, MS-SQL.
- **Mobile**: Android, iOS, Windows.
- **Standards**: OPENIoT, HomeKit, Thread, Nest, Alljoyn, Brillo & Weave.
END-TO-END SYSTEM ARCHITECTURE

DATA CENTER MONITORING & CONTROL SYSTEM ARCHITECTURE

A: Time Based AC Control unit

B: Environmental Monitoring unit

C: UPS Power Anomaly detection unit

D: Hi-Gate - Central Gateway with Zig-Bee and Wi-Fi/GPRS Communication

E: hIOTron Platform - Code -Less IoT Integration Platform

F: Mobile Application & User Dashboard
With reference to above image below you will get step by step details of each and every block from A to F which will be required & used for Data Center Monitoring & Control.

A. **Time Based A.C Control** – This is a simple stand-alone zig-bee enabled relay unit which can be used to switch 6 ACs (On/Off) on a time basis or as per requirement.

B. **Environment Monitoring unit** – With this unit all major required monitoring parameters such as Carbo Monoxide, Water detection, Motion detection, Temperature, Humidity and Open/Close Door detection can be known.

C. **UPS power anomaly detection unit** – For 3-phase 15 KVA UPS current/voltage Monitoring & Anomaly detection this unit can be used.

D. **Hi-Gate** - A Central Gateway with zig-bee and Wi-Fi or GSM/GPRSs communication coded with this specific application.

E. **hIOTron IOT Platform** - Free Access of hIOTron enterprise IOT platform with advance Device connectivity, Device management, Data storage, Data Analytics and Dashboard or Application enablement features.

F. Application Specific Mobile application & Dashboard
<table>
<thead>
<tr>
<th>S.N.</th>
<th>Unit</th>
<th>Description</th>
<th>Qty.</th>
<th>Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A.C. Control unit</td>
<td>Onboard 6 Channels Relay (Output 5A 230VAC)</td>
<td>1</td>
<td>58</td>
<td>$58</td>
</tr>
<tr>
<td>B</td>
<td>Environment Monitoring unit</td>
<td>All above mentioned sensors &amp; door on/off detection with switch out-board mounting</td>
<td>1</td>
<td>65</td>
<td>$65</td>
</tr>
<tr>
<td>C</td>
<td>UPS power anomaly detection unit</td>
<td>Power detection with switch in-board mounting</td>
<td>1</td>
<td>110</td>
<td>$110</td>
</tr>
<tr>
<td>D</td>
<td>Hi-Gate</td>
<td>USB powered with Zig-bee &amp; Wi-Fi, GSM/GPRS (2G) provision</td>
<td>1</td>
<td>150</td>
<td>$155</td>
</tr>
<tr>
<td>E &amp; F</td>
<td>IOT Platform &amp; Mobile Application, Dashboard</td>
<td>Basic Model (Optional)</td>
<td></td>
<td>Lifetime access</td>
<td>Free</td>
</tr>
</tbody>
</table>

**Total Cost** $388
Important Notes:

- Delivery period 8 – 10 weeks.
- Above Charges excluding shipping.
- Installation Support via online & manuals.