

interseptor | New Market | New York | New Yo

POWER & ENVIRONMENTAL MONITORING SOLUTION

for Data Centres, Server Rooms and Racks

interSeptor iMeter is an advanced environmental and power monitoring solution that has been designed to help provide IT personnel with answers to the following 10 questions:

- How can I reduce the power usage in my data centre
- Which racks in my data centre are using the most power and are the most expensive to run
- Can I reduce the power consumption in my data centre racks
- Can I assess whether it is more economical to invest in newer, less power-hungry IT equipment rather than continuing to run my existing equipment
- Can temperature in the data centre be safely increased to help reduce air conditioning and air handling running costs
- Can I build up a clear picture of power usage over time that will enable me to reduce my Amps Per U-space Ratio (AU) and running costs
- > What effect do internal computer fans have on the AU ratio
- Can I reduce power usage without effecting network operations
- Is it possible to be notified immediately about significant changes in data centre power and environmental conditions that may otherwise have serious repercussions for network availability
- Can a solution to all the above questions be adopted without disruption to the existing network infrastructure and without downtime

THE INTERSEPTOR IMETER SOLUTION



3 principal components make up the iMeter solution:

Jacarta Go-Probe Power and Environmental Sensors

iMeter Master device with 8 x sensor ports

iMeter Slave device with 8 x sensor ports

Go-Probe Power and Environmental Sensors

The Jacarta range of Go-Probe sensors can be connected to each iMeter Master or iMeter Slave device in any combination to provide full flexibility for your power and environmental monitoring solution. Go-Probe sensors include:

- intelliAmp Current Sensor (Amps)
- intelliVolt Voltage Sensor (Volts)
- Temperature/Humidity Sensor
- Airflow Sensor

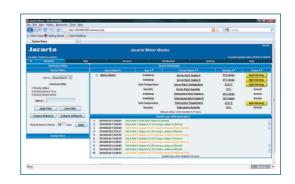
- Water Leak Detector
- Smoke Detector
- Security Sensor (door open)
- Motion Sensor (PIR)

iMeter Master

The iMeter Master module is a 1U rackmountable ethernet device with remote monitoring capability via its web browser interface, SNMP, Modbus and RS485. The device is equipped with 8 x sensor ports and 4 x expansion ports for connection of iMeter Slave devices. Multiple Jacarta Go-Probe sensors can be monitored from a single IP address in conjunction with iMeter Slave modules.

iMeter Slave

Each iMeter Slave supports up to 8 Go-Probe Power and Environmental Sensors and is equipped with daisy-chain in and out ports for connection to the iMeter Master and/or other Slave devices. Up to 18 Slave modules can be connected to each iMeter Master expansion port (72 Slave modules are supported by the iMeter Master in total).



POWER MONITORING

The power of the iMeter solution lies in its range of intelligent sensors. The sensors can be connected and monitored in any combination, and can be installed without network downtime.

intelliAmp Current Sensor

The remarkable intelliAmp Current Sensor has been designed to monitor the current draw of racks via 16A and 32A cables. The sensor contains a unique calibration mechanism to enable it to be positioned at the point on the cable where the optimal current reading can be obtained. The fact that the sensor simply clips to the cable means that no network downtime is required to start monitoring power into your racks.



The intelliAmp sensor can be used to track power usage within racks over time to ensure consumption can be gradually reduced as equipment is upgraded. The sensor can also allow users to make power usage comparisons between racks and identify the most and least expensive racks to run. By building up a picture of power consumption across the data centre down to rack level, IT personnel can start to effectively manage power usage going forward and make savings where possible.

The flexibility of the intelliAmp sensor means it can also be used to identify the effects on power consumption of running fans in a rack, for instance, or the power implications of running the data centre at a higher temperature: This may help to reduce air conditioning power consumption but it may also result in internal fans working harder and an increased power usage in this area. The key thing is that the intelliAmp will help you to understand what is happening with the power in your data centre and manage it more efficiently.



Unlike other data centre power monitoring solutions that require downtime for implementation, the intelliAmp can be installed in live environments as it simply clips around the cable that needs to be monitored.



intelliVolt Voltage Sensor

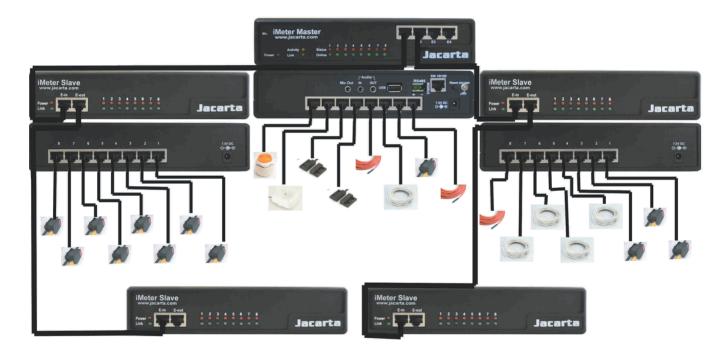
The intelliVolt voltage sensor simply connects into one of the iMeter sensor ports and plugs into a mains power outlet. Voltage is monitored between 0 and 265V.

ENVIRONMENTAL MONITORING

A variety of environmental sensors are available with the iMeter to ensure your data centre or racks are constantly monitored for potentially catastrophic events. Alerts can be delivered rapidly to IT and Facilities personnel via email, SNMP or SMS to ensure remedial action can be taken quickly.

The Jacarta GoProbe sensors can be connected to the iMeter Master and Slave modules in any combination. Sensors can be auto-detected by the iMeter to simplify installation and configuration.

The following diagram highlights the potential sensor capacity and flexibility of the iMeter.



Additional iMeter Features

Web browser interface

SNMP

Voice and SMS alerts via GSM Modem (Optional)

Email alerts

Modbus

Event Manager

Device map

User configurable alarm thresholds

Historical and real time graphs

Please see separate sheet for full iMeter specifications. All specifications may be subject to change without notice.

