# Global market potential

## Why power management

With increasing pressure coming from economical, ecological, legislative and corporate social responsibility drivers, this is the era of optimization of the use of energy. The general aim is doing more with less, knowing that the demand of energy is increasingly exceeding production capacity. In all consequence energy cost is doomed to increase over the next years and even decades.

In order to control and optimize power consumption the very first hurdle is to measure and monitor as much as possible. Where assumptions and estimations until recently sufficed today's trend is to measure and monitor as accurately as possible with an increasing level of granularity.

The sheer fact of measuring power data is believed to result in an immediate 10% drop of consumption. In addition measuring power metrics generate 3 levels of critical data sets in this era of data analytics (source IBM) resulting in the optimized use of power:

- **Level 1 - Descriptive data**
  - Data should be as accurate and granular as possible, for this will be the foundation to make the right analysis - what's the now situation, how to go from A ("as is") to B ("to be") without accurate data.
- **Level 2 - Predictive data**
  - Predictive data enable capacity management, helping to address future requirements - what can happen if?
- **Level 3 - Prescriptive data**
  - Ultimately data when processed can result in telling people what they must do in order to optimize the use of power - what will happen? Which option to choose is the best one.

Racktivity **power management and environmental control products and solutions** address a broad range of various challenges in different markets. They allow gathering the 3 types of data sets as described above. They also enable a holistic view on the totality of the power consumers in enterprises and organizations.

The unique blend of game changing HW products, award winning power management software, atypical adaptability (strategic agility, vision, ability to execute), deep power knowledge and software automation define Racktivity as a next generation power management company about to conquer this expanding industry.

# Potential for Racktivity

## Power distribution units (PDUs) – Racktivity intelligent EnergySwitch PDUs

The current global PDU market is estimated to be USD 1B of which USD 200M are allocated to intelligent PDUs like the EnergySwitch PDUs. This share is increasing significantly and swiftly due to different drivers as described above. The Europe share is estimated to be 22% of total global demand.

## Data Center Infrastructure Management (DCIM) – Racktivity DCPM software

The below are the worldwide forecast numbers, 451 research estimate that Europe accounts for +/- 22% of the worldwide figures.

- **451 Research**
  - 2012 – USD 429M
  - 2013 – USD 886M
  - 2106 – USD 1.8B
- **IDC**
  - 2011 - USD 144M
  - 2016 – USD 690M
- **Gartner**
  - 2012 - USD 450M
  - 2016 - USD 1.7B
- **MarketsAndMarkets**
  - 2011 – USD 307M
  - 2017 – USD 3.1B

## Branch level circuit monitoring - Racktivity AC$^2$Sensors (AC Power)

The potential for AC$^2$Sensors is hard to estimate but based on some indirect facts we can deduct some figures.

The rack mount PDUs allow for monitoring and management of IT devices built into IT racks (IT side of data centers). In order to obtain a holistic power consumption view on data centers all non-IT or facility devices (UPS, dumb PDUs, gens sets, CRAC units, HVAC, etc.) needed to support IT in data centers must be monitored too. This can be achieved with AC$^2$Sensors. If intelligent PDUs are worth USD 200M, AC2Sensors may account for USD 50-150M (data centers only).

This is an assumption but not an entire one. AC$^2$Sensors can monitor virtually any AC power consumer, be it in data centers, other technical environments like telecom PoPs, feed building management systems (BMS), plants or even regular buildings and retail businesses. The use cases are so vast it is impossible to make a proper estimation of the potential yet it is huge.

- Branch level circuit monitoring – Racktivity DC$^2$Sensor (DC Power)

The DC$^2$Sensor was developed specifically for a renowned telecom operator and can monitor any and every DC power consumer. The verticals using DC powered equipment are vast: telecom, mobile, broadband, broadcast, satellite service providers are all using DC powered equipment, often deployed in wide spread smaller technical infrastructures such as PoPs, base stations, head ends, … Moreover due to the dispersed nature of these PoPs, remote management is a must the business is asking for.

Some feedback we received from the market on the DC$^2$Sensor:

**USA – Electronic Environments**
"Many of our key customers are telecom operators and service providers. We have been looking for solutions to monitor DC power for quite some time now and never found a fitting solution until now at Racktivity. In the mean time several global players such as Verizon, AT&T, T-Mobile and many more have expressed an interest in testing this device" – Ken Rapoport, Managing Director Electronic Environments.

**UK – Virgin Media**
"We definitely have needs to monitor our infrastructures, to lower PUE (carbon emission) and avoid downtime. The DC$^2$Sensor is a solution that we have been looking for but so far couldn't find elsewhere".

**France – SFR**
"We have some strategic projects coming up to monitor a large number of remote PoP's. The DC$^2$Sensor fits perfectly in these projects since so far our current partners are not offering this kind of solutions".

Note: SFR asked Racktivity to get in touch with its main provider Schneider Electric in order to integrate DC$^2$Sensors in the total solutions offering Schneider presents to SFR.

**France – Schneider Electric**

Upon the request of SFR for Racktivity to contact Schneider Electric, Schneider Electric probed if Racktivity would consider OEM both AC$^2$Sensors and DC$^2$Sensor since this would be considered the missing elements in their offering.

# Conclusion

When carefully reading the above problem set in the industry and according to potential, Racktivity is a game changing company in the power management industry with a bright future ahead, especially since it addresses one of the most urgent and important challenges in today's society.

We invite you to contact us since we are looking for solid technology partners with a large scale proven track record in bringing disruptive solutions to the market.