GE VERNOVA

POWER CONVERSION DIGITAL SOLUTIONS

Smart software applications that optimize operations and performance, enable predictive maintenance and provide cyber-secure remote service solutions. Our modular solutions connect data and insights with the right people. Each of our three easy-to-navigate modules focuses on a key area of improvement. All the solutions are available on-prem and cloud-based.

The digital suite is powered by Visor, which allows for secure data transmission between the customer site and the Power Conversion (a business of GE Vernova) Visor portal and provides automatic alerts for drive faults. Visor helps to expand the capability and resource of your organization with a 'lean' mindset. It is the secure data historian for the system, enabling data led services and digital capabilities. In addition, Visor is a preferred software repository that enables secure management server.

Services+ helps to extend your organization's capability and resource with a 'lean' mindset. It's about tapping into Power Converison expertise at the point you need it, and includes our remote engineering solution for remote monitoring, diagnostics and support

Maintenance+ includes the asset performance management solution that protects your investment in valuable equipment by improving availability. It provides a view on the health of your critical assets with early warnings of developing issues to help you take timely, corrective actions. This can unlock a shift from unplanned to planned downtime, or even helps to avoid downtime altogether.

Operations+ solution include performance, process and energy optimization. Operational efficiency, reliability and safety are enhanced with real-time feedback on operational Key Performance Indicators (KPIs), with advisories for timely and targeted intervention.

OUR SOLUTIONS FOCUS ON 3 KEY AREAS

Services+
Access remote services and experts for on-tap asset health support.

Maintenance+
Improve reliability and availability, right-timing maintenance and planning downtime.

Operations+
Unlock greater efficiency in ops performance and energy efficiency.

Powered by Visor: Security | Connectivity | Data

1 Remote services and Cybersecurity

Lean mindset, expand the capability and resource of your organisation

2 Asset Performance Management (APM)

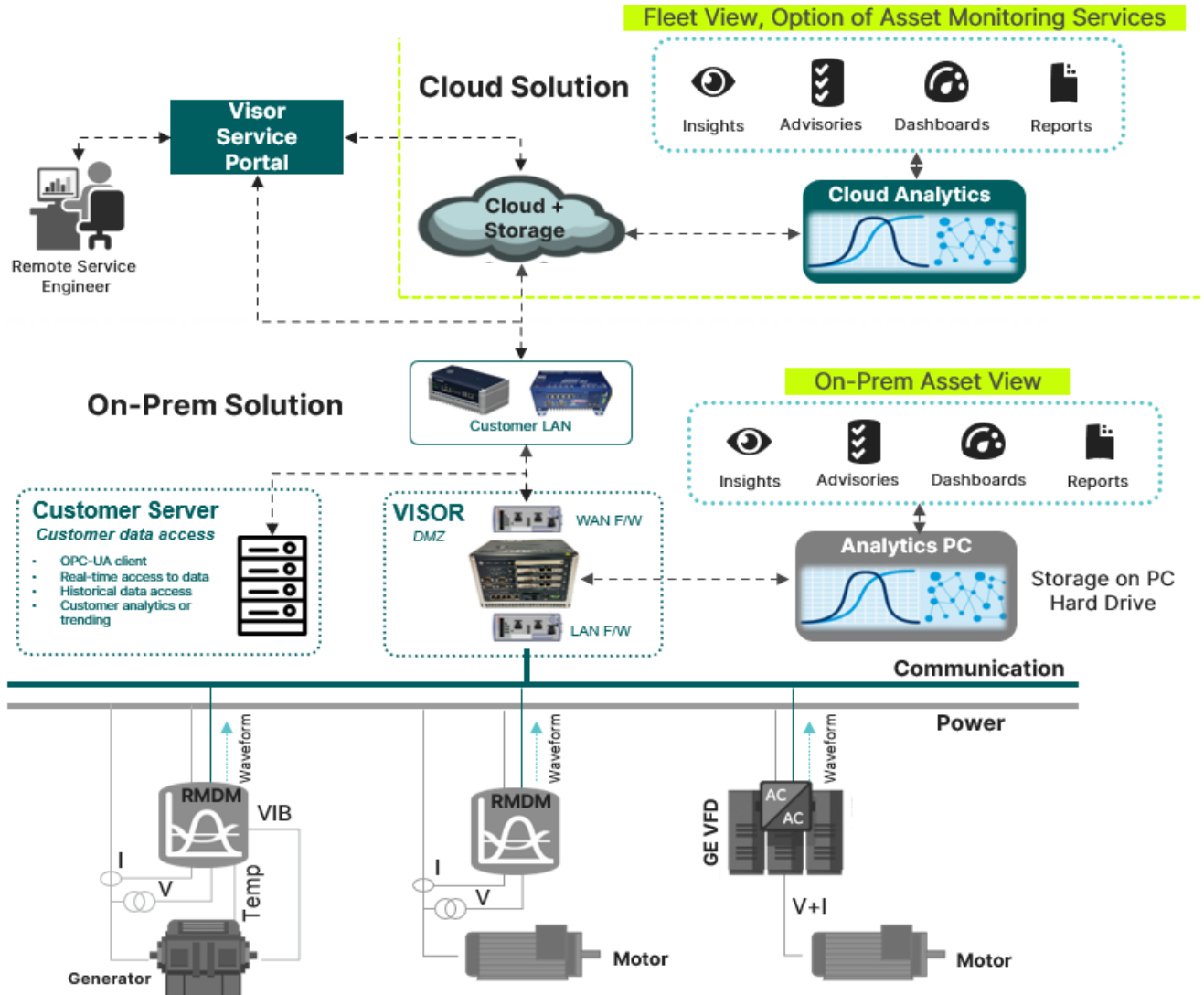Monitor **health** of assets, **optimize** maintenance and **prevent unplanned downtime**

3 Optimiser

Enhance operations **efficiency, predictability, reliability**, and **safety**

CONTACT US : Contactus.powerconversion@ge.com

General Architecture

Fleet View, Option of Asset Monitoring Services

Cloud Solution — Insights, Advisories, Dashboards, Reports — Cloud Analytics — Cloud + Storage — Visor Service Portal — Remote Service Engineer

On-Prem Asset View

On-Prem Solution — Customer LAN — Insights, Advisories, Dashboards, Reports — Analytics PC — Storage on PC Hard Drive

Customer Server
Customer data access
- OPC-UA client
- Real-time access to data
- Historical data access
- Customer analytics or trending

VISOR DMZ — WAN F/W — LAN F/W

Communication — Power

RMDM — VIB — Generator — Motor — GE VFD — Motor — Waveform — Temp — V+I

CLOUD	• Latest algorithm and security updates will be applied automatically by Power Conversion only in cloud solution • Site to site comparison possible only in cloud solution • Power Conversion Engineers available for customer support with access to data • During baselining data is available to Power Conversion Engineers for baselining (customer does not need to share the data manually) • Data Storage for an extended timeline • Adding additional assets is simpler • Automatic email alerts available
ON-PREM	• Latest algorithm and security updates requires site visit • Site comparison is not possible • Power Conversion Engineers available for customer support with switchable data access (or copy of the data). • During baselining period customer need to share data for ~ 1 month to Power Conversion through switchable data access or emails/folders to set up thresholds and alerts • Data storage limited to hard disk capacity • Adding additional assets requires site visit • Automatic email alerts not available (alerts available in alarm sheet of ON-Prem • Analytics)