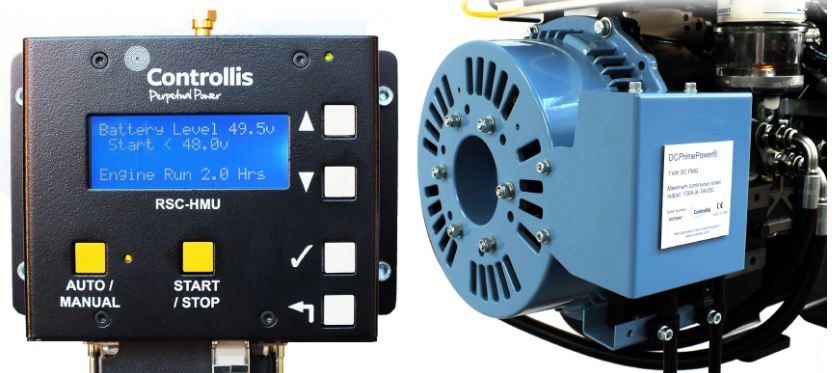




**Controllis**  
Perpetual Power

# Controllis DC OEM Partnership Solutions



## Overview

The Controllis OEM Partnership Solution enables generator manufacturers to quickly and economically produce highly fuel-efficient DC generator solutions for the telecoms market place. Controllis works closely with OEM partners' in-house staff and distributors to provide marketing, technical and sales support and to specify market-ready solutions. Controllis also provides post-sale technical back-up and spares support. Controllis OEM Partnerships utilise Controllis' DCPrimePower® range of high efficiency permanent magnet generators with integral voltage conversion and filtering. In addition, Controllis provides its state of the art Remote System Controllers (RSC) which monitor and control engine speed, telecoms battery charging-voltage, generator start & stop and a wide range of other mission-critical parameters.

## Benefits of Controllis DC OEM Partnership

As more and more telecoms sites in developing countries are deployed into areas of poor power availability, the need for remotely-managed and fuel-efficient on-site power generation solutions is set to experience massive growth. It is estimated that over 800,000 telecoms sites rely on diesel power generators for all or some of their site power. Given the relative inefficiency of AC generator solutions, many of them reaching end-of-life utility, the Controllis DC OEM Partnership Solution offers the following benefits to site operators and to OEM Partners..

### Benefits for Site Operators

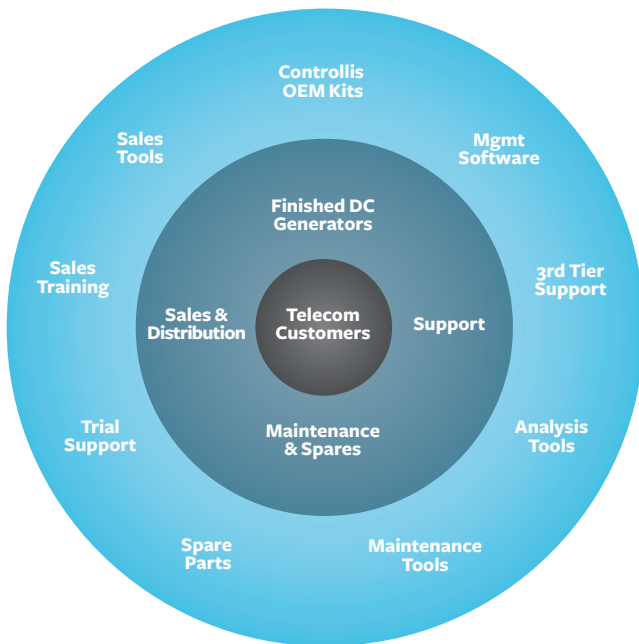
- Significantly lower fuel consumption than traditional AC generator solutions
- Built-in hybrid-battery charge control
- Seamless integration with solar and other renewable solutions
- Advanced monitoring and data-logging functionality
- Lower capital cost than other solutions
- Reduced operating & maintenance costs
- Higher ROI

### Benefits for OEM Partners

- Increased product range
- Lower cost of entry to DC Generator market
- Increased market-share with highly reliable solutions
- Complete solution including hybrid battery charging control
- Strengthened brand presence in telecoms sector

## Solution Offering

The Controllis OEM Partnership Solution includes the following components and support systems.



This ensures that our OEM partners can rapidly and cost-effectively introduce commercially sound DC power solutions to their customers.

## Controllis OEM Partnership Kits

Controllis OEM Partnership Kits include the following:

- Controllis DCPrimePower® DC Generator, available in 5kW, 7kW or 12kW continuous power output
- Controllis RSC-HMU controller
- Variable speed engine throttle controller
- Wiring loom
- DC Breaker, relays, fuses etc

To manufacture a complete generator the OEM Partner need to provide the following:

- Engine
- Anti-vibration mounts
- Acoustic Housing
- Exhaust system
- Labour.

*Note: All the generator auto start and stop functionality is provided by the Controllis Kit – there is no need for any traditional generator controller.*

## Pre Sales Support

Controllis provides the following pre-sales support to its OEM Partners:

- **Sales Tools** – Controllis has a range of business models, marketing collateral and other sales tools to help OEM Partners and their distributors generate sound business-case and financial-forecasts for prospective customers.
- **Sales Training** – Controllis provides sales training to the OEM Partners and their distributors' sales forces. The training addresses the benefits, key features and covers frequently asked questions by prospective customers.
- **Trial Support** – Controllis provides on-site and remote trial support. We will assist in the interpretation and management of the trial data in order to produce interim and post trial reports of key parameters in order to quantify fuel-savings.

## Post Sales Support

Controllis provides the following post-sales support to its OEM Partners:

- **Management Software** – The Controllis remote management server (RMS) provides remote site control and condition monitoring. Although Controllis expects its telecom operators and OEM Partners to monitor remotely deployed generators, we can offer a 24/7 monitoring service if required.
- **3rd Tier support** – Controllis Engineers provide remote support in order to help partner teams to answer any technical query or provide remote configuration support when needed.
- **Analysis Tools** – Controllis has a range of analysis tools for reporting the performance of remote sites. Performance reports can include; fuel consumption, renewable source performance, site load and other variables of interest to the end user.

## Maintenance Support

- **Maintenance Tools** – Controllis has developed generator maintenance tools to ensure required generator maintenance is done at correct intervals and that end-of-life components are replaced in a timely manner. The maintenance activities are automatically and securely stored in each individual generator database together with the maintenance technician's unique identifier.
- **Spare Parts** – Controllis OEM solutions have very long MTBF's on all components. We keep emergency stocks of key spares & parts at our OEM Partner sites for rapid access when required.