

**Mobile  
Asset Management**

**CONNECTING THE DOTS**

**Mobile Diesel Generator Management**

***m*PreSt**



## Challenges in Achieving Centralized Command and Control

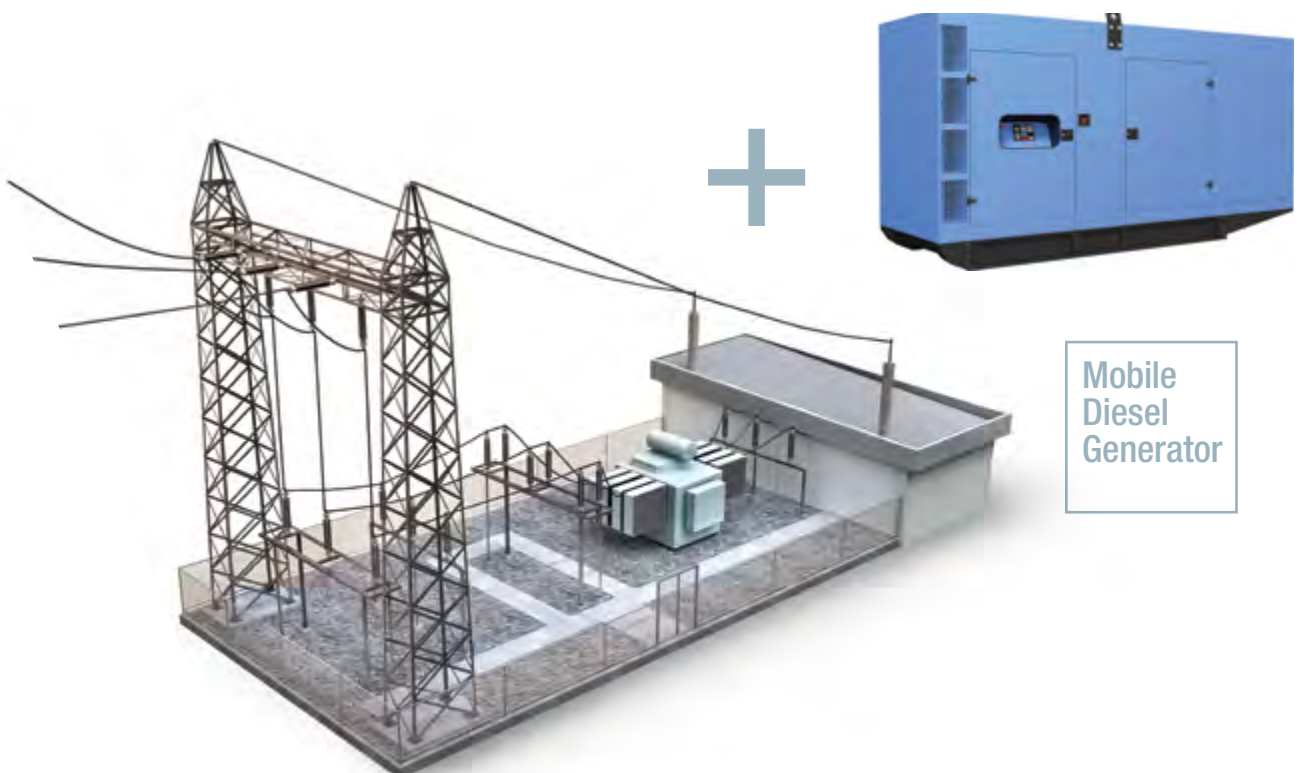
Power utilities face numerous challenges managing mobile diesel generator fleets. Essential for disaster recovery, extreme weather conditions, and special events, a typical fleet may comprise hundreds to thousands of independently operating diesel generators and diesel trucks. As fleets commonly utilize multi-vendor generators and platforms, monitoring and control is cumbersome and lack a single unified view.

## mDGS: "System of Systems" for Diesel Generator Management

mPrest's Diesel Generator control System (mDGS) connects all the dots to form an integrated "system-of-systems". The comprehensive platform integrates with existing generation fleet systems, delivering an accurate situational awareness and management platform by centrally managing all diesel generator-related domains, including:

- Geo positioning and dispatch management
- Maintenance management
- Emissions management
- Cannibalization and theft management
- Diesel levels
- Load levels
- Asset health and others

Cost-efficient mobile asset management is about interconnectivity - getting all components to speak a common language





### Optimal Cost-Effective Automation

mDGS is a fully automated platform capable of monitoring relevant Key Performance Indicators (KPIs) as they may relate to the mobile diesel generator fleet. The "system of systems" interconnects all fleet-related data points, enabling automated fleet management, in accordance with the utility company's standard operating procedures. For example, mDGS can automatically dispatch a diesel truck to fuel a critical generator while automatically communicating with other nearby diesel generators in order to top them up as well. The centralized, automated command and control manages all fleet related domains in real time, assisting power utilities to achieve cost-efficiency and top operational performance year-round. This allows:

- Lower OPEX and CAPEX
- Reliable generation flow with lower costs due to lower down time
- Fewer break downs resulting from diesel clogging and poor maintenance
- Localized generation top up
- Carbon emissions quota management
- Better utilization of backup generation reserves

### Full Suite Of Features

mDGS is a first of its kind platform to meet the full scope of diesel fleet management needs and preferences. The highly adaptable platform offers the most extensive selection of features, including:

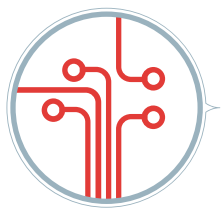
- Interactive GIS map
- Video display, management and playback
- Powerful and flexible rules engine
- Full cycle incident management
- Automatic task scheduling
- User defined automatic procedures
- Generator relocation to comply with emission quotas
- Single-site, multi-site or hierarchical structure
- Automatic monitoring of entire system health



### IoT Gateway Specifications

mDGS is pre-integrated with leading IoT gateways and can integrate with your gateway of choice with the below (and additional) specifications:

- ✓ Input Voltage 8 to 60VDC Barrel Jack or Passive PoE or 36 to 60VDC 802.3af Compatible PoE
- ✓ DC input power supply provides up to 30W of power to the MiniPCle
- ✓ Operating Current : 0.17A Typical @ 24VDC
- ✓ Freescale™ i.MX6 Dual Core ARM® Cortex™ A9 SoC processor operating at 800MHz, 1Gbyte of DDR31066 DRAM, and 256Mbytes of System Flash
- ✓ Peripherals feature four high-power MiniPCle sockets capable of supporting any combination of 802.11abgn radios, 4G WiMAX radios, 3G CDMA/ GSM cellular modems and other PCI Express peripherals
- ✓ Micro SD™ Flash Expansion Socket
- ✓ Four HighPower Gen 2.0 MiniPCle Sockets
- ✓ SIM Socket
- ✓ RS232 Serial Port
- ✓ Optional RS485 Serial Port



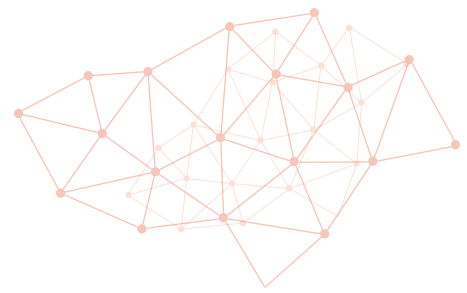
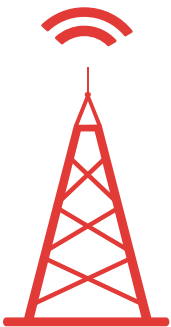
## Environmental Operating Parameters

Temperature:

40°C to +85°C

Humidity (Non-condensing):

20% to 90%



## About mPrest

mPrest is a leading provider of monitoring, control and analytical software for the Industrial Internet of Things (IIoT), HLS and defense sectors. Its product-based platform “connects the dots” across diverse standards and complex systems. Acting as a “system of systems”, the automated platform fully integrates Operational Technology (OT) and Information Technology (IT), delivering an unprecedented situational awareness, together with real-time incident response.

mPrest nurtures strategic partnerships with systems integrators and organizations worldwide, enabling them to optimize their operations by improving system performance, expediting project deployment, and reducing total cost of ownership and risk. Flagship projects include the world-renowned “Iron Dome” Missile Defense System and the first of its kind Asset Health Management System for predicting electrical transformer health.

The company is active in the following global markets:

- Power and water utilities
- Safe & smart cities
- Critical facility protection
- Homeland security (HLS)
- Telecommunications operators

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