

PRODUCT FOCUS



**Power Generation
& Mobile Machine
Control Experts.**



DSE

DEEP SEA ELECTRONICS

DSE
WELCOME

Electronics Excellence
Since 1975.



About DSE

INDUSTRY LEADING CONTROL SYSTEMS.

A GLOBAL BUSINESS YOU CAN TRUST.

Deep Sea Electronics (DSE) is a UK-based manufacturer with over 50 years of experience developing advanced control and display solutions for power generation and mobile machine applications. Designed and manufactured in the UK, our products are trusted by OEMs worldwide for their quality, reliability, and performance.

With more than 230 employees and a global channel partner network, DSE serves a wide range of sectors across power generation, construction, mining, agriculture, material handling, and other demanding applications. Our intelligent generator controllers provide advanced control, protection, and monitoring for single genset and paralleling genset applications, while our programmable controllers and displays deliver flexible

machine control and intuitive operator interfaces for mobile machinery. Our portfolio also includes transfer switch controllers, battery chargers, and comprehensive remote monitoring solutions.

DSE is renowned for its industry-leading technical support and engineering expertise, working closely with customers throughout the entire buying journey – from initial application and product selection, through design, integration, commissioning, and long-term operation. Combining UK manufacturing excellence with global engineering capability, we remain committed to delivering innovative, future-ready solutions that enhance system performance, reliability, and operator experience.

UK MANUFACTURING.

EXCELLENCE THROUGH AUTOMATION.

Our manufacturing processes combine advanced automation with rigorous quality control to ensure every DSE product is built to the highest standards. Automated optical inspection systems test products at multiple stages throughout the build process, helping to deliver consistent quality, reliability, and performance to every customer.

GLOBAL SUPPORT NETWORK.

MAXIMISING SYSTEM UPTIME.

Our global support network delivers exceptional support across the full range of DSE hardware and software. Dedicated regional support hubs ensure customers have fast, accessible assistance wherever they are in the world. Supported by an extensive network of channel partners, DSE provides expert support throughout the customer journey across all our core markets.



series

Advanced Paralleling Genset Controllers.

The **DSEG8-Series** is our most advanced genset controller range, designed for multiple gensets with complex paralleling requirements. The advanced modules control and monitor demanding application environments with critical infrastructure requirements, including banks, stadiums, hospitals and data centers.



DSEG8600

**Parallel Genset Controller
with Integral Heater**

- 9 configurable digital inputs
- Maximum of 12 digital outputs
- UL Listed: UL 6200:2019



DSEG8660

Mains (Utility) Controller

- 9 configurable digital inputs
- 8 digital outputs
- UL Listed: UL 6200:2019



DSEG8680

Bus-Tie Controller

- 12 configurable digital inputs
- 10 digital outputs
- UL Listed: UL 6200:2019



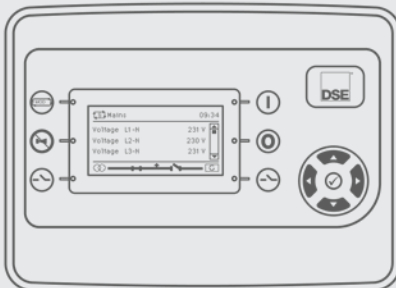


DSE G810

DSESCADA 10" Display

- Optically bonded 10.1" colour display for harsh environments
- Daylight visible, anti-glare display (1000 cd/m² (nit))
- Capacitive touch screen with glove support
- UL Listed: UL 6200:2019

Standard Parallel Genset Controller.



DSE G8500

Standard Parallel Genset Controller

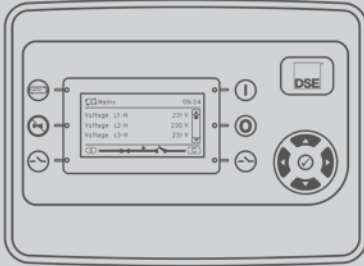
- 9 configurable digital inputs
- 12 digital outputs
- UL Listed: UL 6200:2019



New
Technology
.....
Coming
Soon



Advanced Single Genset Controllers.



DSEG7400 (Ethernet)

Advanced Single Genset Controller

- 8 configurable digital inputs (6 configurable for analogue)
- 10 digital outputs
- UL Listed: UL 6200:2019



DSEG7300

Advanced Single Genset Controller

- 8 configurable digital inputs (6 configurable for analogue)
- 10 digital outputs
- UL Listed: UL 6200:2019

The DSEG7300 & DSEG7400 are advanced remote start controllers and auto mains (utility) failure controllers suitable for a wide variety of single, diesel or gas, genset applications. Monitoring an extensive number of engine parameters, the controllers display warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LEDs and remote PC. The DSEG7300 & DSEG7400 can also monitor the mains (utility) supply.



Cyber security ready architecture for today's connected power systems.



FuSa ready architecture for safety critical power applications.





Compact Single Genset Controllers.



DSEG4500 / G4501 (RS485)

Compact Single Genset Controller

- 4 configurable digital inputs (3 configurable for analogue)
- 6 digital outputs
- UL Listed: UL 6200:2019

The DSEG4500 Compact Single Genset Controller and DSEG4501 Compact Single Genset Controller with RS485 are part of the next-generation DSEG-Series platform, designed for versatility and performance. User-configurable for Remote Start (RS) or Automatic Mains (Utility) Failure (AMF) applications, they offer a robust feature set tailored to single genset operations.

Selected features include real-time monitoring of generator and load power, engine speed, oil pressure, coolant temperature, frequency, voltage, current, power, and fuel level. All critical data is displayed on a dedicated multi-line, text and icon high-resolution screen.





Load Sharing & Synchronising Controllers.



DSE load sharing & synchronising control modules are designed to control single or multiple generators across a wide range of synchronising applications. These include simple load sharing systems that require basic configuration through to demanding systems with advanced control and monitoring requirements.



DSE8620 MKII
Synchronising Auto Mains (Utility)
Failure Load Share Controller
UL Listed: UL 6200:2019



DSE8660 MKII
Auto Transfer Switch & Mains (Utility)
Controller
UL Listed: UL 6200:2019



DSE8680
Synchronising Generator
Bus-Tie Controller
UL Listed: UL 6200:2019



DSE8610 MKII
Synchronising & Load Sharing
Auto Start Controller
UL Listed: UL 6200:2019



Manual / Auto Start / AMF Controllers.

DSE has a flexible range of single genset controllers for prime power and standby power applications. Each controller utilises a common PC software platform for simple configuration and intuitive user-interface for ease of use. Levels of configuration are controller specific, allowing users to select the right solution for controlling and monitoring their gensets, on-site and from remote locations.



DSE4520 MKII

Auto Mains (Utility) Failure Control Module

UL Listed: UL 6200:2nd Edition



Auto Start Configurable



DSE6120 MKIII

Auto Mains (Utility) Failure Control Module

UL Listed: UL 6200:2nd Edition



Auto Start Variant Available



DSE7320 MKII

Auto Mains (Utility) Failure Control Module

UL Listed: UL 6200:2019



Auto Start Variant Available



DSE7420 MKII

Auto Mains (Utility) Failure Control Module

UL Listed: UL 6200:2nd Edition



Auto Start Variant Available







Power Generation Applications

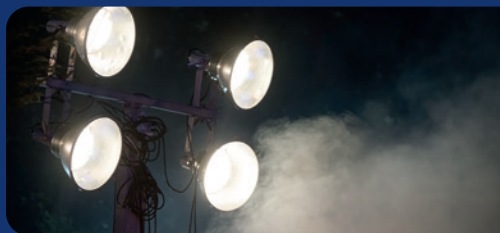
Additional **DSE**Genset®
Product Categories.



Digital Automatic Voltage
Regulators (AVRs)



Mains (Utility) Protection Relays
& Power Meters



Lighting Tower
Control Modules



Remote Communications
& Overview Displays



Software Tools



Expansion Modules

Learn more at www.deepseaelectronics.com

POWER GENERATION



Additional **DSE**Genset® Featured Products.



DSE2160

DSENet® Input / Output Expansion Module

- 8 configurable digital inputs
- 8 configurable outputs
- DSENet® Communication
- UL Listed: UL 6200:2019



DSEA109

Digital Automatic Voltage Regulator (AVR) with CAN Communications & PMG Support

- J1939 communications
- Compatible with single phase and 3 phase power supply source
- Configurable adjustments via onboard potentiometer
- UL Recognized: UL 6200:2nd Edition



DSE2170

DSENet® RTD / Thermocouple Input & Analogue Output Expansion Module

- 4 inputs
- 4 outputs
- DSENet® Communication
- UL Listed: UL 6200:2019



DSEP100

Mains (Utility) Decoupling Relay

- G99/1, G98/1, G59/3, G83/3 and C10/11 compliant
- 5 digital inputs
- UL Listed: UL 508





DSEAts®

DSEAts® control modules are designed to switch power between two independent power sources (S1/S2). They control and monitor the mains (utility) power supply and its voltage, frequency and current and connect to a single genset. When instability in the mains (utility) supply is detected they forward a start command to the back-up power supply, returning power to the mains (utility) when it becomes stable.



DSE335 MKII

Auto Transfer Switch Controller

UL Recognized: UL 1008



DSE334

Auto Transfer Switch Controller

UL Recognized: UL 1008



DSEPower®



DSEPower® offers 12 volt and 24 volt, compact, vertical, intelligent, and enclosed battery chargers. Chargers are available in ratings between 3 amp and 30 amp. All chargers are designed for use with our industry-leading control systems across our core markets. Our charger range is also an excellent choice for rail, marine, smoke AOV and CCTV applications.



DSE9474
24 Volt 30 Amp
Intelligent Battery
Charger



DSEBC2410Ei
12 / 24 Volt 10 Amp
Enclosed Intelligent
Battery Charger
UL Listed: UL 1236

Additional battery chargers are available.
Full battery charger range can be viewed
on the DSE website.



MOBILE MACHINES

DSEM-Series

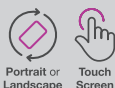
DSEM-Series features a range of programmable controllers and displays for mobile machines.



Reliable Software Partners
for Successful Automation.



DSEM812
12" Programmable Display



- Optically bonded 12.1" 1000 cd/m² (nit) colour LCD display with 16 configurable colour backlit keys
- i.MX 6 quad processor
- 16 GB flash / 2 GB RAM
- E11 Approval: E11*10R06/02*11860*03

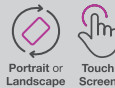


DSEM870
7" Programmable Display

- Optically bonded 7" colour display for harsh environments
- Powerful ARM Cortex A9 processor with 800 MHz clock speed
- 512 MB of DDR3 SDRAM / 2 GB NAND mass storage
- UL Listed: UL 6200:2019
- E11 Approval: E11*10R05/01*11955*00



DSEM810
10" Programmable Display



- Optically bonded 10.1" 1000 cd/m² (nit) colour LCD display, with 12 configurable colour backlit keys
- NXP i.MX 8 DualXPlus processor with GPU
- 8 GB flash / 1 GB RAM
- E11 Approval: E11*10R06/02*13005*00



DSEM835
3.5" Programmable Display

- Optically bonded 3.5" colour display for harsh environments
- Powerful processor with Cortex M7 400 MHz clock speed
- 512 KB of SDRAM / 8 MB flash storage

DSEM840 4.3" Programmable Display is also in the product range and details can be viewed on DSE website.

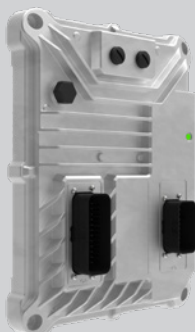


Controllers



DSEM640
Programmable
Controller (68 I/O)

- 32 bit processor with 220 MHz clock speed
- 32 configurable inputs with digital / analogue capability
- 36 configurable outputs with digital, PWM and PWMI
- E11 Approval: E11*10R06/02*9491*02



DSEM643
Programmable
Controller (34 I/O)

- 32 bit processor with 220 MHz clock speed
- 16 configurable inputs with digital / analogue capability
- 18 configurable outputs with digital, PWM and PWMI
- E11 Approval: E11*10R06/02*10176*01



New
Technology
.....
Coming
Soon

DSEM805

5" Programmable Display

In development by Deep Sea Electronics, the upcoming DSEM805 Programmable Display is set to redefine compact machine control, delivering the power, flexibility, and visual performance of a much larger HMI in an ultra-compact 5" platform, enabling OEMs to bring advanced capability to space-constrained applications without compromise.



Key Features:

- 5" optically bonded anti-glare 1000 cd/m2 (nit) display (800 x 400)
- 4 configurable inputs
- 4 configurable outputs
- 2 camera inputs
- 1 audio output
- 8 configurable soft-keys (RGB)
- 2 x CAN communications interfaces
- USB & Ethernet
- Panel / RAM mount options
- IP67 protection
- CODESYS 3.5 / Qt

In-Depth Testing for Assured Quality.

DSE products undergo rigorous testing to meet the latest industry standards and ensure full CE compliance. Comprehensive EMC testing is carried out in accordance with the relevant BS EN standards, with quality checks performed throughout the production process. Finished products are also subjected to real-world testing to verify performance, reliability, and suitability for their intended operating environment. Nothing leaves the DSE facility until it has met our exacting standards and is ready for reliable operation in the field.



CE Marking



E11 Marking



Mechanical Testing



EMC Testing



Climatic Testing



Electrical Testing

Industry-Leading Technical Support from DSE – Anytime, Anywhere



Technical Support.

DSE provides comprehensive global technical support across the complete customer journey, from initial concept and product selection through to system design, installation, commissioning, and long-term operation. Our specialist channel partner network works alongside DSE's in-house technical support and engineering teams to provide customers with expert guidance at every stage, backed by global coverage and industry-leading support available 24 hours a day, 7 days a week.

Whether customers are identifying the right controller for a new application, evaluating an upgrade or replacement solution, developing a system design, configuring a product, or requiring advice during installation and commissioning, our experienced teams are on hand to provide practical, application-focused support. We can also assist with specific product features, configuration, troubleshooting, and optimisation throughout the lifetime of the installation.

Our commitment to customer support extends well beyond the initial purchase. By combining extensive product knowledge, engineering expertise, and a global network of trained partners, DSE builds long-term relationships with customers, ensuring they have access to the advice and assistance they need to maximise the performance, reliability and value of their DSE solutions throughout their operational life.

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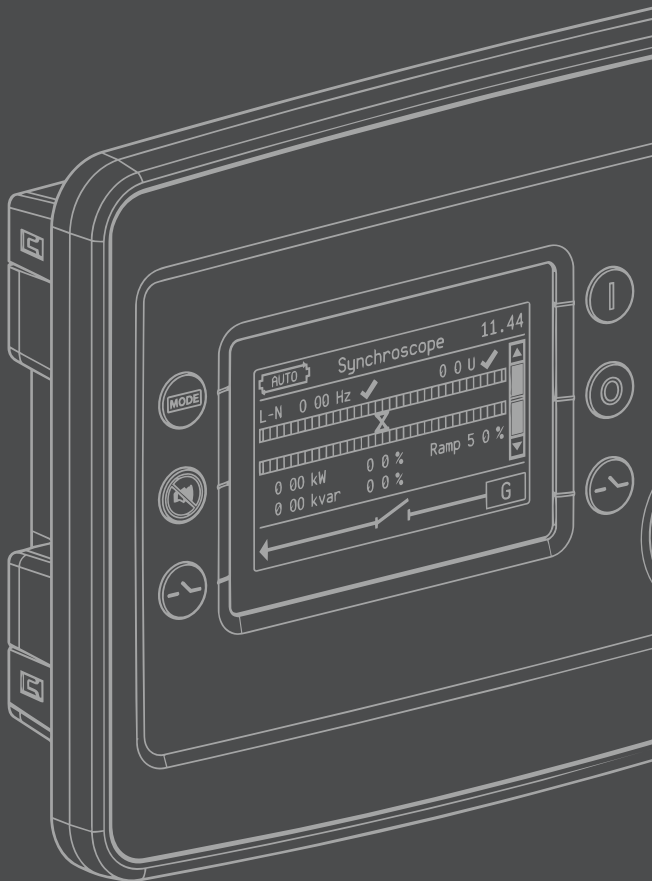
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