



# FEATURES

The DSE7310 is an Auto Start Control Module and the DSE7320 is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas, gen-set applications.

Monitoring an extensive number of engine parameters, the modules will display warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LEDs, remote PC and via SMS text alerts (with external modem). The DSE7320 will also monitor the mains (utility) supply. The modules include USB, RS232 and RS485 ports as well as dedicated DSENet® terminals for system expansion.

Both modules are compatible with electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engines and offer an extensive number of flexible inputs, outputs and extensive engine protections so the system can be easily adapted to meet the most demanding industry requirements. The extensive list of features includes enhanced event and performance monitoring, remote communications, PLC functionality and dual mutual standby (DSE7310 only) to reduce engine wear.

The modules can be easily configured using the DSE Configuration Suite PC software. Selected front panel editing is also available.

### ENVIRONMENTAL TESTING STANDARDS

### ELECTRO-MAGNETIC COMPATIBILITY

BS EN 61000-6-2 EMC Generic Immunity Standard for the Industrial Environment BS EN 61000-6-4 EMC Generic Emission Standard for the Industrial Environment

#### ELECTRICAL SAFETY BS EN 60950

Safety of Information Technology Equipment, including Electrical Business Equipment

#### TEMPERATURE

BS EN 60068-2-1 Ab/Ae Cold Test -30 °C BS EN 60068-2-2 Bb/Be Dry Heat +70 °C

## VIBRATION

BS EN 60068-2-6 Ten sweeps in each of three major axes 5 Hz to 8 Hz @ +/-7.5 mm, 8 Hz to 500 Hz @ 2 gn

# HUMIDITY

BS EN 60068-2-30 Db Damp Heat Cyclic 20/55 °C @ 95% RH 48 Hours BS EN 60068-2-78 Cab Damp Heat Static 40 °C @ 93% RH 48 Hours

#### **SHOCK** BS EN 60068-2-27

Three shocks in each of three major axes 15 gn in 11 mS

#### DEGREES OF PROTECTION PROVIDED BY ENCLOSURES

PROVIDED BY ENCLOSURE BS EN 60529

IP65 - Front of module when installed into the control panel with the supplied sealing gasket.

# COMPREHENSIVE FEATURE LIST TO SUIT A WIDE VARIETY OF GEN-SET APPLICATIONS

DSE2130 DSE2157 DSE2548 DSE2510/20	MODEM MODBUS	PC	8	★ 4	Ź.		i i i
DSENET° EXPANSION	RS232 AND RS485	USB PORT	CONFIGURABLE INPUTS	DC OUTPUTS	ANALOGUE SENDERS	EMERGENCY STOP	DC POWER SUPPLY 8-35V
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DSE7310/20							
MAINS (UTILITY) SENSING DSE7320 ONLY	N/C VOLT FREE OUTPUT	N/O VOLT FREE OUTPUT	GENERATOR SENS	ING	CHARGE ALTERNATOR	FUEL & CRANK OUTPUTS (Flexible with CAN)	ELECTRONIC ENGINES & MAGNETIC PICK-UP
VOLTS	ţ۲	¢۲.			D+ W/L	ţţ	<b>^</b> {z
1ph 2ph 3ph N			1ph 2ph 3ph E N	1ph 2ph 3ph N			



ISSUE 6



# DSE7310/20 **AUTO START & AUTO MAINS FAILURE CONTROL MODULES**

DSE7320

# **FEATURES**



# **KEY FEATURES**

- 4-Line back-lit LCD text display
- Five key menu navigation
- Front panel editing with PIN protection
- Customisable status screens
- Power save mode
- Support for up to three remote display units
- 9 configurable inputs
- 8 configurable outputs
- Flexible sender inputs
- Configurable timers and alarms • 3 configurable maintenance
- alarms
- Multiple date and time scheduler .
- Configurable event log (250)
- Tier 4 CAN engine support
- Integral PLC editor
- Easy access diagnostic page
- CAN and Magnetic Pick-up/Alt. sensing
- Fuel usage monitor and low fuel alarms
- Charge alternator failure alarm Manual speed control (on
- compatible CAN engines) Manual fuel pump control
- Engine exerciser
- "Protections disabled" feature
- kW & kV Ar protection
- Reverse power (kW & kV Ar)
- protection

# **RELATED MATERIALS**

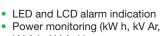
TITLE	PART NO'S
DSE7310 Installation Instructions	053-028
DSE7320 Installation Instructions	053-029
DSE7200/7300 Quick Start Guide	057-101
DSE7200/7300 Operator Manual	057-074
DSE7200/7300 Configuration Suite PC Manual	057-077

# DEEP SEA ELECTRONICS PLC UK

Highfield House, Hunmanby Industrial Estate, Hunmanby YO14 0PH **TELEPHONE** +44 (0) 1723 890099 **FACSIMILE** +44 (0) 1723 893303 EMAIL sales@deepseaplc.com WEBSITE www.deepseaplc.com

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DEEP SEA ELECTRONICS



- kV A h, kV Ar h)
- Load switching (load shedding and dummy load outputs)
- Automatic load transfer (DSE7320)
- Unbalanced load protection
- Independent Earth Fault trip
- True dual mutual standby with load balancing timer (DSE7310 only) USB connectivity
- Backed up real time clock
- · Fully configurable via DSE
- Configuration Suite PC software Configurable display languages
- Remote SCADA monitoring via DSE Configuration Suite PC
- software • User selectable RS232 and **RS485** communications
- Configurable Gencomm pages
- Advanced SMS messaging (additional external modem required)
- Start & stop capability via SMS messaging
- Additional display screens to help with modem diagnostics
- Idle control for starting & stopping.
- DSENet® expansion compatible
- · Heated display option available

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# **KEY BENEFITS** 132 x 64 pixel ratio display for

- clarity Real-time clock provides
- accurate event logging Multiple date and time scheduler
- Set maintenance periods can
- be configured to maintain optimum engine performance
- Ethernet communications (via DSE855 module), provides advanced remote monitoring
- Modules can be integrated into building management systems
- (BMS) Increased input and output expansion capability via DSENet®
- Licence-free PC software
- IP65 rating (with supplied gasket) offers increased resistance to water ingress
- PLC editor allows user configurable functions to meet specific application requirements

#### FREQUENCY RANGE 3.5 Hz to 75 Hz

OUTPUTS OUTPUT A (FUEL) 15 A DC at supply voltage

SPECIFICATION

during cranking.

0 V to 35 V

DC SUPPLY CONTINUOUS VOLTAGE RATING 8 V to 35 V Continuous

Able to survive 0 V for 50 mS, providing supply was at least 10 V before dropout and supply recovers to 5 V. This is achieved without the need for internal batteries

LEDs and backlight will not be maintained

MAXIMUM OPERATING CURRENT 340 mA at 12 V, 160 mA at 24 V

MAXIMUM STANDBY CURRENT

CHARGE FAIL/EXCITATION RANGE

MAINS (UTILITY) DSE7320 ONLY VOLTAGE RANGE 15 V to 415 V AC (Ph to N) 26 V to 719 V AC (Ph to Ph)

160 mA at 12 V, 80 mA at 24 V

**CRANKING DROPOUTS** 

**OUTPUT B (START)** 15 A DC at supply voltage

OUTPUTS C & D 8 A 250 V (Volt free)

#### AUXILIARY OUTPUTS E,F,G,H 2 A DC at supply voltage

GENERATOR VOLTAGE RANGE 15 V to 415 V AC (Ph to N) 26 V to 719 V AC (Ph to Ph)

FREQUENCY RANGE 3.5 Hz to 75 Hz

MAGNETIC PICK UP VOLTAGE RANGE +/- 0.5 V to 70 V

#### FREQUENCY RANGE 10,000 Hz (max)

DIMENSIONS OVERALL 240 mm x 181 mm x 42 mm 9.4" x 7.1" x 1.6

PANEL CUT-OUT 220 mm x 160 mm 8.7" x 6.3"

MAXIMUM PANEL THICKNESS 8 mm 0.3"

**OPERATING TEMPERATURE RANGE** -30°C to +70°C

STORAGE TEMPERATURE RANGE -40°C to +80°C

TELEPHONE +1 (815) 316 8706 FACSIMILE +1 (815) 316 8708 EMAIL sales@deepseausa.com WEBSITE www.deepseausa.com Registered in England & Wales No.01319649 VAT No.316923457

3230 Williams Avenue, Rockford, IL 61101-2668 USA

**DEEP SEA ELECTRONICS INC USA** 

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