

DSEPOWER® SHARING WITH SIMPLICITY.



DSE7560

AUTO TRANSFER SWITCH & MAINS (UTILITY) CONTROL MODULE



The DSE7560 is an Automatic Transfer Switch and Mains (Utility) Control Module, designed to automatically synchronise multiple DSE7510s with single or multiple mains (utility) supplies.

The module instructs the DSE7510s to make precise changes to the generating set outputs. This makes the module suitable for many applications including peak lopping, peak shaving and no break return.

The module has the ability to monitor the mains (utility) supply and start and stop the generating sets (being controlled by a DSE7510) upon removal or detection of the mains (utility) supply. The modules operational status is indicated on the LCD display and the front panel LEDs.

FEATURES

- Multiple language options
- Back-lit 4-line text LCD display
- Configurable timers
- Configurable inputs (9)
- Configurable outputs (5)
- Automatic hours run balancing
- Peak lopping control for DSE7510 controlled generator bus
- Peak shaving
- No break return
- PIN protected programming
- Full remote control and telemetry
- Mains (utility) fail monitoring
- Load demand scheme
- Multiple mains (utility) monitoring
- System lock input
- Load switching control push-button inputs
- Event log
- LED indicators
- PC configurable

NEW RELEASE

BENEFITS

- On-site module configuration
- In-built diagnostics removes the requirement for service equipment
- Transfers between mains and generator
- Remote control and monitoring of the module using comprehensive DSE PC software
- License free PC software

OPERATION

The module is operated using the front STOP/RESET, MANUAL, AUTO, TEST and START push buttons.

The first four of these push buttons include LED indicators. Additional push buttons provide LCD page display scroll, lamp test, mute and load switching functionality.

SPECIFICATION

DC SUPPLY

8V to 35V continuous

CRANKING DROPOUTS

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

MAXIMUM OPERATING CURRENT

460mA at 12V. 245mA at 24V

MAXIMUM STANDBY CURRENT

375mA at 12V. 200mA at 24V

GENERATOR BUS INPUT RANGE

15V(L-N) to 333V AC (L-N) absolute maximum

MAINS (UTILITY) CT BURDEN

0.5VA

GENERATOR BUS INPUT FREQUENCY

50Hz - 60Hz at rated engine speed
(Minimum: 15V AC L-N)

MAINS (UTILITY) SENSING INPUT RANGE

15V(L-N) to 333V AC (L-N) absolute maximum

MAINS (UTILITY) SENSING INPUT FREQUENCY

50Hz - 60Hz (Minimum: 15V AC L-N)

AUXILIARY RELAY OUTPUTS

2A DC at supply voltage

GENERATOR BUS LOADING RELAY OUTPUT

8A AC 250V – normally open

MAINS (UTILITY) LOADING RELAY OUTPUT

8A AC 250V – normally closed

DIMENSIONS

240mm x 172mm x 57mm
9.4" x 6.8" x 2.2"

PANEL CUTOUT

220mm x 160mm
8.7" x 6.3"

ENVIRONMENTAL TESTING STANDARDS

ELECTRO MAGNETIC CAPABILITY

BS EN 61000-6-2
EMC Generic Emission 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 60068-2-2
Test Ab to +70°C 60067-2-2 Hot
Test Ab to -30°C 60068-2-1 Cold

VIBRATION

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

HUMIDITY

BS 2011 part 2.1 60068-2-30
Test Cb Ob Cyclic
93% RH @ 40°C for 48 hours

SHOCK

BS EN 60068-2-27
Three shocks in each of three major axes
15gn in 11mS

INSTRUMENTATION

The DSE7560 module provides advanced metering functionality, displaying the information on the LCD display. The information can be accessed using the scroll push button located next to the LCD display.

Bus Volts (L1-N, L2-N, L3-N)
Bus Volts (L1-L2, L2-L3, L3-L1)
Bus Hz
Bus kW % of full capacity
Bus kVA % of full capacity
Bus Phase Sequence
Load Amps, pf
Load kW, kVA, kVAh
Mains (utility) Volts (L1-N, L2-N, L3-N)
Mains (utility) Volts (L1-L2, L2-L3, L3-L1)
Mains (utility) Hz
Mains (utility) Amps
Mains (utility) kW
Mains (utility) Kw % of full capacity
Mains (utility) kVA
Mains (utility) pf
Mains (utility) kVAh
Mains (utility) kVAh % of full capacity
Mains (utility) kWh
Mains (utility) kVAh
Mains (utility) kVAh
Mains (utility) Phase Sequence
Synchroscope
System Battery Voltage

TIMERS & INPUT FUNCTIONS

The module has been designed to include the following timers and input functions:

- Mains transient delay
- Start delay
- Transfer time
- Breaker pulse control timers
- Return delay
- DC battery alarm delay timers
- Parallel run time
- Export power limit
- Bus close delay

EVENT LOG

The module includes a comprehensive event log that shows the 25 most recent alarm conditions and the date and time that they occurred. This function assists the user when fault finding and maintaining a generating set.

EXPANSION MODULES

DSE157 Relay Output Expansion Module
DSE545 & DSE548 Remote Annunciation Expansion Module
DSE130 Input Expansion Module

BUILT-IN FUNCTIONS

- Peak lopping/peak shaving
- 9 configurable digital inputs
- 5 configurable and 2 fixed outputs
- System lock inputs
- Load switching inputs
- ROCOF/vector shift
- Insufficient capacity alarm
- PIN
- Scheduler

COMMUNICATIONS

The DSE7560 includes a number of different communication capabilities:-

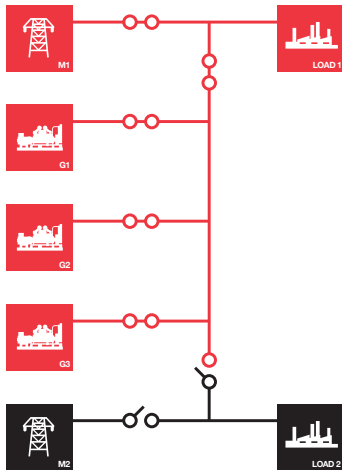
Building Management

The module has been designed to integrate with new and existing building management systems.

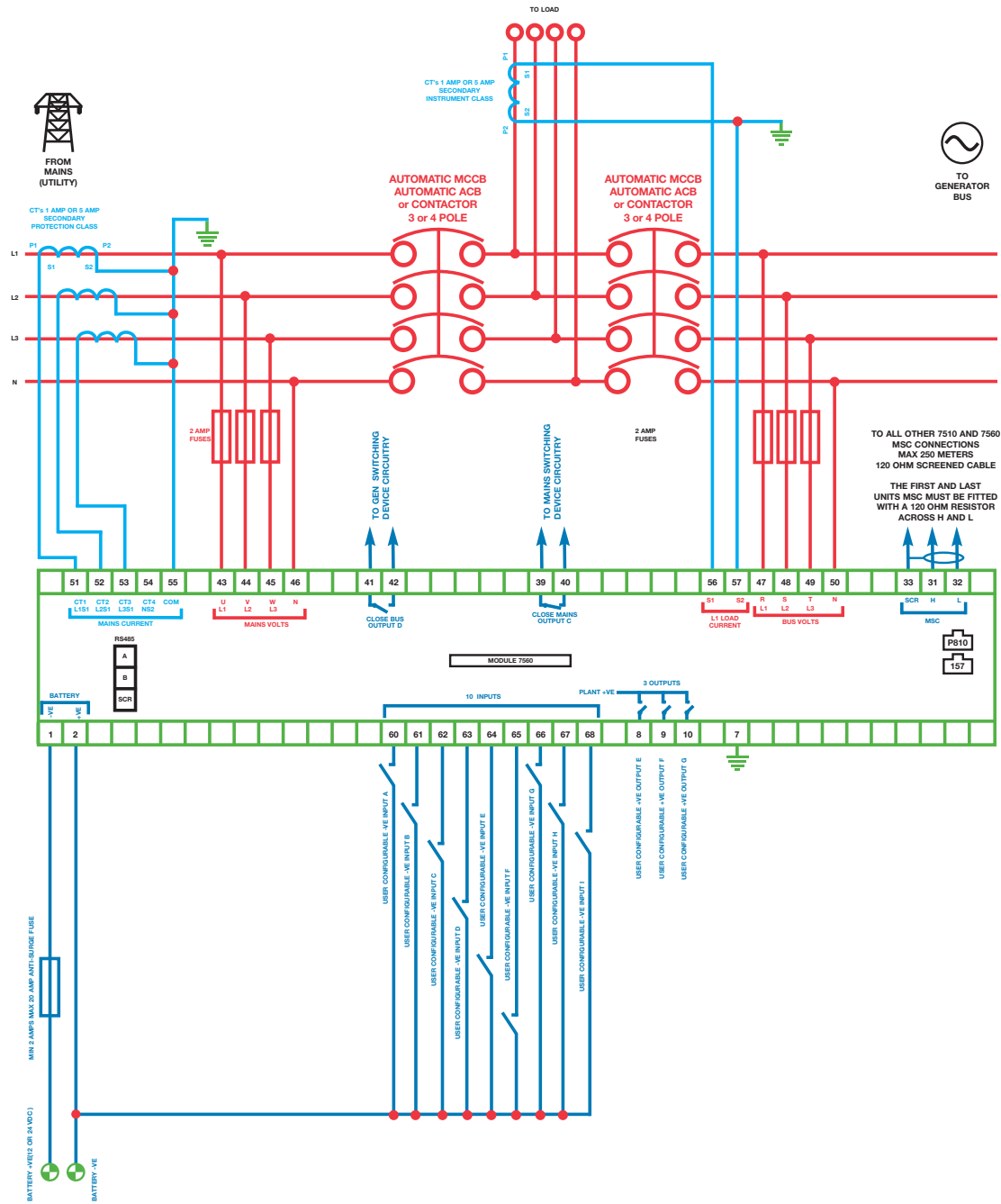
SCADA/PC Software

The module has the ability to be controlled, configured and monitored from a remote PC, using the DSE810 interface.

TYPICAL LOAD SHARE APPLICATION



DSE7560



RELATED MATERIALS

TITLE	PART NO'S
DSE7560 Manual	057-090
DSE7560 Installation Instructions	053-054
DSE75xx PC Software Manual	057-078
DSE7510 Data Sheet	055-065
DSE7520 Data Sheet	055-066
DSE810 Manual	057-052
Load Share Design and Commissioning Guide to Synchronising and Load Sharing	057-047
CAN and DSE Wiring Guide	057-045/6
DSE850 Comms Software Data Sheet	057-004
	055-072

DEEP SEA ELECTRONICS PLC

Highfield House
Hunmanby Industrial Estate
Hunmanby, North Yorkshire
YO14 0PH England

TELEPHONE

+44 (0)1723 890099

FACSIMILE

+44 (0)1723 893303

EMAIL

sales@deepseapl.com

WEBSITE

www.deepseapl.com



Registered in England & Wales No.01319649

VAT No.316923457

DEEP SEA ELECTRONICS INC

3230 Williams Avenue
Rockford
IL 61101-2668 USA

TELEPHONE

+1 (815) 316 8706

FACSIMILE

+1 (815) 316 8708

EMAIL

sales@deepseausa.com

WEBSITE

www.deepseausa.com

YOUR LOCAL DISTRIBUTOR.

DEEP SEA ELECTRONICS PLC maintains a policy of continuous development and reserves the right to change the details shown on this data sheet without prior notice. The contents are intended for guidance only.

This data sheet is printed on 9lives 55 Silk, which is produced with 55% recycled fibre from both pre and post-consumer sources, together with 45% virgin ECF fibre.

