

## Oseis™ II Electronic Initiating System



### Description

The Oseis™ II Electronic Initiating System is designed specifically for the Oil and Gas market. The system combines a high strength accurate electronic detonator and a secure firing system to achieve reliability and precision for the harsh conditions common to geophysical exploration.

The Oseis™ II system consists of the following components:

- Oseis™ II Next Generation Electronic detonator – highly accurate and programmable.
- Oseis™ Tester – multi function device used during loading to perform detonator function, identification and positioning tasks.
- Oseis™ Shooter – connects to the conventional shooting system via the trigger cable to fire the shot.
- Oseis™ Project Management Software.

### Application

The Oseis™ II system is designed specifically for geophysical exploration and can be used for both single and pattern firing applications in challenging environments.

### Key Benefits

#### Detonator

- Highly accurate and programmable detonator.
- Two-way communications allow the detonator to be checked via control equipment any time from loading to firing.

- Inherently safe by design, the system is protected against accidental or unintended detonation caused by over voltage, static electricity, stray currents or electromagnetic inductions.
- Ensures initiation reliability with all Orica detonator sensitive explosives, even at low temperatures.
- Harsh environment construction assures long sleep times in harsh in-hole conditions.

### Equipment

- The Oseis™ Shooter II memory can save data for up to 1000 shot points. Each logged shotpoint is marked with a time and date stamp via the internal real time clock (RTC).
- Data is transferable to a computer with using Tester II and III.
- Oseis™ Shooter II has a firing capacity up to 10 Oseis™ electronic detonators in a single pattern shot.
- Shooter II Data is transferable to computer-based software.
- Oseis™ project management software enables security tracking and inventory control of detonators via a unique ID number for every detonator that can be matched to a shotpoint location.

### Properties

Oseis™ II detonator	Constant firing time, system accuracy: ± 1.0 ms at 20 ms after trigger signal
Leg wire:	Duplex steel wire
Tensile strength	22 kg (48 lb or 220 N)
Wire insulation:	Temperature and abrasion resistant polymer
Wire color:	Yellow
Base charge:	8* strength detonator.
Hydro static pressure resistance:	21 days, consult Orica specialist for more information.

### Packaging

Oseis™ II detonators are available in figure 8 and spool format as indicated below:

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The Oseis™ hardware can only be used with Orica Oseis™ II electronic detonators. Attempting to use this equipment with other products is not recommended. The Oseis™ hardware is only compatible with Orica Oseis™ Project Management Software. Attempting to interface this equipment with other software products is not recommended.

### Storage and Handling Product Classification

Authorised Name: Oseis™ II  
 Correct Shipping Name: Detonators Electric  
 UN No. 0255, PG II  
 Class Code 1.4B

All regulations pertaining to the handling and use of such explosives apply.

### Storage and Transport

Oseis™ II detonators should be stored in a cool, dry licensed detonator magazine. Stacks of cases should be no more than 2 meters or 6.5 feet high. For recommended good practices in transporting, storing, handling, and using this product, refer to the “Always and Never” booklet packed inside each case.

Recommended temperature conditions:

Activity		Detonators
Operating	min	-40°F / -40°C
	max	140°F / 60°C
Transport/Storage	min	-40°F / -40°C
	max	140°F / 60°C

Oseis™ Testers and Shooters should be stored in a protective case in a location not subject to high temperatures or humidity. Normal storage precautions applying to electronic equipment will maximize the useful life of the control equipment.

### Disposal

Disposal of explosive materials can be hazardous. Methods for safe disposal of explosives may vary depending on the

Leg Length m / ft	Wire Format	Units per Case
4 / 13	Folded	60
7 / 24	Folded	50
10 / 35	Folded	36
13 / 45	Folded	32
16 / 55	Spooled	48
20 / 65	Spooled	48
25 / 85	Spooled	36
30 / 100	Spooled	36
36 / 120	Spooled	24
40 / 130	Spooled	24
60 / 200	Spooled	24

Oseis™ Testers and Shooters are available in nylon carry cases to protect equipment during transport, storage and use. Oseis™ Testers and Shooters contain sensitive electronic circuitry that is designed to be robust under normal operating conditions. However, care should be taken to prevent this equipment from being subject to mechanical damage through rough handling or impact.

### Recommendations for Use

The Oseis™ II System is designed to provide accurate, secure and reliable initiation of explosives used in seismic surveys. Priming the explosive and subsequent operations must be carried out in a manner that will ensure that the leg wires and Oseis™ II detonator are not damaged. The Oseis™ II detonator should always be secured inside a suitable explosive device, which fully encloses the Oseis™ II detonator shell to protect it from damage during charging and ensure reliable charge initiation. Exposed Oseis™ II detonators should not be placed inside blastholes.

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user's situation. Please contact a local Orica representative for information on safe practices.

### Safety

Oseis™ II detonators can be initiated by extremes of shock, friction or mechanical impact. As with all explosives Oseis™ II detonators should be handled and stored with care. Excessive force should not be applied to the leg wires under any circumstances. If an explosive charge becomes stuck when attempting to retrieve or reposition it, a replacement charge should be used.

The Oseis™ II System complies with the principle of 'Inherent Safety'. This means the Oseis™ Tester, used at the blasthole, is unable to fire Oseis™ II detonators even if the Tester and the Detonator develop faults. In addition, the Oseis™ Tester does not contain any circuitry or programming capable of generating program, arm and fire signals.

This Technical Data Sheet is for information only. The Oseis™ II System should only be used by personnel that have been trained to use this system.

### Trademarks

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### Disclaimer

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### Emergency Telephone Numbers

Within Australia: 1800 033 111  
Outside Australia: 61 3 9663 2130

Canada: Orica Canada emergency response 1-877-561-3636  
USA: Chemtrec 1-800- 424-9300