

# i-kon™ Surface Remote Blasting System (SURBS)

## Description

The *i-kon™* Surface Remote Blasting System (SURBS) is comprised of an *i-kon™* Blaster 2400R (or Blaster 2400R) and an *i-kon™* Surface Remote Blast Box (or SURBB) equipped with radio modems, *i-kon™* Loggers and *i-kon™* electronic detonators. Operation of the *i-kon™* Blaster 2400R is very similar to other wired *i-kon™* Blasters.



*i-kon™* Blaster 2400R

*i-kon™* Surface Remote Blasting Box

## Applications

*i-kon™* SURBS allows blasters to initiate *i-kon™* and non-electric blasts conveniently and remotely from a chosen point-of-safety, well away from any safety hazard or blast effects. Orica will help to arrange the radio licenses that are required in most countries. Within the European Union a license free band is used.

## Key Benefits

- *i-kon™* SURBS enables the full functionality of the *i-kon™* electronic blasting system, including SHOTPlus®-i blast design software.
- *i-kon™* SURBS minimizes production downtime required to fire blasts by eliminating the time and expense of running out (and perhaps retrieving) a blasting cable.
- *i-kon™* SURBS has sufficient range for all surface mining applications.
- Multiple security features make *i-kon™* SURBS virtually immune to interference, unauthorized use, or operator error.
- The *i-kon™* Blaster 2400R displays a full detonator status report at the control point before firing (as usual), which allows the blaster to confirm that all is well with the blast at firing time.
- Communication integrity between the *i-kon™* Blaster 2400R and *i-kon™* SURBB can be checked at various locations before firing time to ensure a trouble-free blasting process.
- The *i-kon™* Blaster 2400R and *i-kon™* SURBB both contain rechargeable batteries, with the battery status displayed on the LCD screen or by LEDs respectively.

## Recommendations for Use

This *i-kon™* SURBS equipment can only be used with *i-kon™* detonators. Never use *i-kon™* SURBS control equipment with another manufacturer's electronic detonators or electronic blasting control equipment. Follow the recommended procedures for testing the system for reliability of communications before actual use. Run all circuit wiring to *i-kon™* equipment so as to minimize the chances of wire damage due to vehicles, people and falls of ground. Most *i-kon™* blasting equipment, including *i-kon™* SURBS hardware, has rechargeable batteries which should always be fully charged before use. Always use this and other blasting equipment according to its Operating Manual and within its specified technical limits. Return *i-kon™* SURBS equipment for servicing at the recommended interval.

## Technical Properties

Capacity – maximum blast size	2,400 <i>i-kon™</i> detonators (control of 12 <i>i-kon™</i> Loggers)
Maximum length of harness wire per <i>i-kon™</i> Logger	2,000 m, which corresponds to 260 Ohms under ideal conditions of no current leakage
Maximum blasting cable between <i>i-kon™</i> Loggers and <i>i-kon™</i> RBB	130 Ohms under ideal conditions of no current leakage
Maximum line-of-sight separation of RBB from <i>i-kon™</i> Blaster 2400R	2,500 m
Operating temperature	-20 °C to +60 °C
Storage temperature	-25 °C to +65 °C
Effective operating window per battery charge	4 hours, reduced by excessive communication testing and cold temperatures
<i>i-kon™</i> Blaster 2400R and <i>i-kon™</i> SURBB Environmental Ratings	Water and shock resistant (IP54 lid open, IP 67 lid closed)
<i>i-kon™</i> Blaster 2400R and <i>i-kon™</i> SURBB external dimensions	406 x 330 x 174 mm
European Union: Radio modems power and operation frequency range	0.5 Watt, 869,4125-869,6375 MHz

## Product Classification

Authorised Name: *i-kon™* Surface Remote Blasting Box

Authorised Name: *i-kon™* Blaster 2400R

## Storage and Handling

*i-kon™* SURBS equipment should be transported and stored at -25 °C to +65 °C. It may be used in the temperature range -20 °C to +60 °C. Avoid rough handling and keep the lid of both boxes closed whenever possible.

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### Safety

The *i-kon™ SURBS* system has excellent safety features. A Smart Dongle is required to convey the *i-kon™ SURBB* serial number and a generated one-time code from the *i-kon™ SURBB* to the *i-kon™ Blaster 2400R* at the point-of-safety. Until this Smart Dongle is docked in the Blaster, and the code is activated, the *i-kon™ Blaster 2400R* cannot program any detonators. These and other features make *i-kon™ SURBS* a system with the highest safety and security. Always use explosives and associated equipment according to manufacturer's recommendations.

### Trademarks

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