



Replacement RS3 Enhanced Keyboard

- *Configuration Keyboard suffering from old age?*
- *Can't find a compatible replacement?*
- *Thinking of replacing your MTCC operator keyboards?*



Introduction

As many users now want an alphanumeric keyboard with operator functionality, Optomation offers a fully compatible RS3 Enhanced Keyboard. This keyboard offers the functionality of a Configuration QWERTY Keyboard, but has been modified to include dedicated operator keys.

This one keyboard, coupled with a separate cursor control and V15 minimum software (or higher), allows you to do work that otherwise requires two or three keyboards. This means less desk space, less expense and less maintenance.

Even better than the original

Besides resolving the incompatibility issues of modern PC keyboards, we took the opportunity to redesign the keyboard for RS3 users, improving text, symbols, clarity, colour coding and the layout of the all important enhanced keys.

We also include a high quality keyboard cover, providing tough durable protection for your keyboard, sealing out dirt, liquids, moisture and other contaminants.

Our keyboards are **NEW** keyboards. They are not remanufactured, refurbished, or used keyboards. Our confidence in overall quality and customer satisfaction allows us to offer a 2 year money back guarantee on this 100% compatible product.

27 Unique keys for RS3 operation

- **Menu:** Accesses menus and soft function keys that provide important command line operations. The 12 soft function keys change to fit the task the user is performing
- **Callup;** Mimics the loop call-up buttons that display groups, plant units, area names and block tags. Because this keyboard provides up to 96 configured call-up button commands, you don't need a full set of Optional Call-Up keyboards
- **Active→:** Provides direct access to alarm displays that allow you to deal directly with the source of the alarm
- **Alarm ? :** Toggles between an alarm summary and the highest priority unacknowledged alarm banner
- **Ack✓ :** Acknowledge alarm key to accept current active alarm
- **Sil 🎵 :** Silences alarms. This key is not available on other keyboards
- **ΔState:** Toggles between on/off states for discrete processes
- **CRT:** Sequentially connects the keyboard to up to 3 consoles, allowing their control from a single keyboard
- **Screen Print:** Prints text or graphic version of current operating screen
- **Operator Keys :** Various dedicated function keys including LSP-B, OUT-Q, On, Off, Select, Exch, Mode & Recall

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Keyboards just aren't what they used to be

The term "QWERTY" (named after the first six letters on the keyboard) refers to the type of key layout found on nearly all computers and typewriters in the English speaking world. Originally designed in 1868, the keys corresponded to the most commonly used letter pairs at opposite ends of the keyboard to prevent the mechanical typewriter hammers from becoming jammed with one another.

Legend claims that the placement of the keys on the first row was influenced by typewriter manufacturers, who wanted all the keys needed to type the word "typewriter" to be conveniently located, avoiding any hand movement when demonstrating the product.

The RS3 Configuration Keyboard was based on the original 1981 IBM PC keyboard as used in the IBM 8086 computer, the first to separate the keyboard from the computer. Whenever a key was pressed its "make" code was sent to the computer through a serial interface and when released its "break" code was then sent.

If two keys were pressed simultaneously, the keyboard interface would receive two *make* codes before a *break* code, allowing SHIFT, FCN, ALT, CTRL key combinations to be identified (set1). The keyboard had a limited data buffer, basic hardware handshaking and a simple unidirectional serial port.

In 1984, IBM completely redesigned the PC keyboard, creating a new specification for their AT 80286 computers. This called for a bidirectional serial port, mainframe compatibility and a new extended set of scan codes. (set2, still supported today). Computer manufacturers were expected to adopt the new standards in their keyboard interface hardware. Unfortunately for RS3 users, Rosemount did not!

Early AT keyboards offered a compatibility switched circuit but by the mid 90's, the necessary chips were obsolete and keyboard manufacturers dropped the feature completely. In following years support for Microsoft Windows 95 software, PS/2 and USB interfaces was added.

Downgrading or conversion of today's keyboards is not possible. Even if you manage to find the same connector, the electronics, protocol and scan codes are incompatible.

Optomation continues to supply 100% compatible Enhanced Keyboards for the RS3 MTCC console. As far as we know, we are the only independent supplier to offer these. Its all part of our commitment to the RS3, probably the best DCS system ever developed.

Part Numbers

OSEK03	Replacement Enhanced QWERTY Keyboard
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Please note these part numbers are not recognized by Emerson Process Management or their representatives.

Optomation Systems

Optomation Systems is an independent software house, with over 20 years experience of the RS3 Distributed Control System. In addition to RS3 application software, Optomation also supports compatible products and solutions that provide independent migratory paths and life extension for the RS3 control system. This activity is not endorsed or supported in any way by Emerson Process Management.

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