



The D2001K receiver

The Datek D2001K (L/M/PLC) receiver series is designed to safely control industrial and mobile applications. The receiver is suitable for operating overhead cranes, telfers and winches in industrial environments. It is also suitable for operating mobile units, such as concrete chutes/pumps, sewage tankers and hook lifts.

Robust and easy to maintain

The receiver is designed for harsh working environments and a long service life. Separate circuit boards for radio, logic devices and relays with LEDs indicating operating status and information flow make any troubleshooting easy. All connectors and relays are socket-mounted, making it easy to replace the defective module, thereby keeping downtime to a minimum. The receiver is mounted inside a sturdy steel cabinet that complies with protection class IP65. If the receiver will be particularly exposed to such things as chemicals, sea water or road salt, a stainless-steel cabinet can be chosen as an option.

The radio board and logic devices are mounted in an aluminium case inside the receiver cabinet door. The front of the case is fitted with transparent Perspex, making it easy to see the operating status of each board. A quick-release coupling keeps the case in place, so it can easily be removed. This facilitates fast and easy replacement of important electronics, the moving of electronic devices between different receivers, troubleshooting in a more suitable location or sending the unit in for service.

Radio transmission

The receiver's frequency is adjusted to the required frequency band. For frequency shift transmitters, the receiver scans the frequency band until it finds the relevant transmitter with the correct ID code and protocol.

Product benefits

- Suitable for overhead cranes, telfers and winches in industry as well as mobile units, such as concrete chutes/pumps, sewage tankers and hook lifts
- Comes in four basic versions and can be customised according to preference
- Easy to install and maintain
- The use of a unique digital protocol and verification by double processors ensures safety
- Designed for challenging environments and reliable operation. The receiver complies with protection class IP65 and is resistant to chemicals, cold, heat and humidity

Comprehensive safety

Datek uses synchronous data transmission, which means that each bit of data is checked very carefully. Even the smallest deviation from the norm is detected, and then the entire data packet that has been received is rejected. Each system has a unique ID code. If the transmitter's ID code does not match the receiver's, radio communication will never be established.

Both the protocol and its checksum are digitally verified by dual processors using different software. This provides what is known as a redundancy check. If the processors interpret the protocol differently, they immediately shut down all outputs. Such safety features as digitally verified transmission and redundancy checking are just two of the innovations which Datek has pioneered in the area of radio remote control. Since it's founding in 1979 Datek has focused on developing safe radio remote controls, something we still do and will continue to do.

Feedback

The receivers in this series can be provided with two-way communication. Feedback to the transmitter unit is obtained through semi-duplex, which means that only one frequency is utilised for both control signals to the receiver and feedback data. This is advantageous if availability of frequencies is limited, as you are only taking up one frequency instead of two.

The receiver series is available in four different versions

The D2001K can control up to 20 digital functions. The receiver is suitable for applications with one, two or more speed steps.

The D2001KL can control up to four motions proportionally along with nine digital functions. The four analogue outputs are galvanically separated and are fitted with directional and, if required, full-speed relays.

The D2001KM can control up to 14 digital functions. This receiver is more compact (220 x 120 x 90 mm) than the other receivers in this series and is therefore suitable for installation in confined spaces. The receiver enclosure is made of sturdy fibreglass, which complies with protection class IP65.

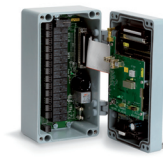
The D2001K PLC has parallel PNP outputs or serial communication via RS-232 for PLC control. The receiver is supplied as standard on a mounting plate with terminal strips to be fitted into a control cabinet together with a PLC. As an option, the receiver can also be supplied in a steel or stainless-steel cabinet.

Options

- Signal horn
- Pre-assembled machine cable with Harting connector
- Extension cable for aerial
- Stainless-steel cabinet

Recommended transmitters

D2801 MIDI
D2801 MIDI Extended
D2012 Hand-Held Transmitter



	2001K	2001KL	2001KM	2001K/PLC
Dimensions	300 x 200 x 160 mm	300 x 200 x 160 mm	220 x 120 x 90 mm	280 x 250 x 70 mm
Output relays	8A/250 VDC	8A/250 VDC	8A/250 VDC	–
Proportional outputs	–	4 pcs 0 – 10 VDC / +/-10 VDC / 4 – 20 mA	–	–
Digital outputs	20	9	14	28 (PNP)
Digital inputs	6	6	6	6
Digital / analogue inputs	8	8	8	8
Serial output	–	–	–	RS232
Frequency	406 – 472 MHz	406 – 472 MHz	406 – 472 MHz	406 – 472 MHz
Temperature range	-25° – 70°C	-25° – 70°C	-25° – 70°C	-25° – 70°C
Protection class	IP65	IP65	IP65	IP20
Supply voltage	12 – 36 VDC / 48, 110, 230 VAC	24 – 36 VDC / 48, 110, 230 VAC	12 – 36 VDC	12 – 36 VDC

Further information

For more information about our radio systems, please visit our website at www.datek.net or call us on +46 8 534 101 50. We will be glad to help you.