





- Sealed to IP65
- PS/2 or USB output
- Integrated left, middle and right switch functionality
- Smooth operation in rugged environments
- Stainless steel shaft and bearings
- Custom connector options available
- Sealing gasket supplied

38 MM OEM TRACKBALLMODULE 3-BUTTON

This compact series are high specification, professional trackballs for use in demanding environments. High-grade stainless steel shafts and bearings ensure a solid and precise pointer control while the patented floating seal technology limits ingress of aqueous solutions and particulates. The trackball module includes left, middle, and right switch functionality as found in all conventional desktop trackballs/mice making this Series a complete human interface solution for control of a cursor.

The unit has been designed to be front of panel mounted as part of OEM keyboards and consoles.

GENERAL TECHNICAL SPECIFICATIONS

Mechanical

Weight ~125 grams
Ball size Ø38.10 mm (1.5")

Ball colour/material Phenolic
Tracking force 30-80 grams

Top plate material/colour PC/ABS - Black RAL9005

Housing material ABS/Black
Mounting position Horizontal to 60°

Sealing material PTFE composite (qualified @ 25°C static)

Tracking engine Dual channel photo-interrupters

Electrical

Output USB or PS2

Supply voltage 4.75V to 5.25V D.C. Supply current 23mA Maximum

Resolution 965 counts per ball revolution

Output connector 8 Way Spox™, Vertical Header, 5267 series, Molex part: 0022035085 Mating output connector 8 Way Spox™, Wire-to-Board, Friction Lock, Molex part: 0050375083

Environmental

 $\begin{array}{lll} \text{Operating temperature} & \text{O C to +65 C (IEC 60068-2-1, IEC60068-2-2)} \\ \text{Storage temperature} & -40 \text{ C to + 85 C (IEC 60068-2-1, IEC60068-2-2)} \\ \text{Operating humidity} & 93\% \text{ RH } @ 40^{\circ}\text{C, non-condensing (IEC 60068-2-78)} \\ \text{Storage humidity} & 10\%-95\% \text{ RH, non-condensing (IEC 60068-2-78)} \\ \end{array}$

Vibration 2g, 10-500Hz, 1 octave/min, 10 sweep cycles (IEC 60068-2-6)

Operating Shock 15g/11ms, ½ sine, 3 shocks in +ve and -ve direction, all 3 axes (IEC 60068-2-27)

Mechanical lifetime 1 million ball revolutions (sealed)

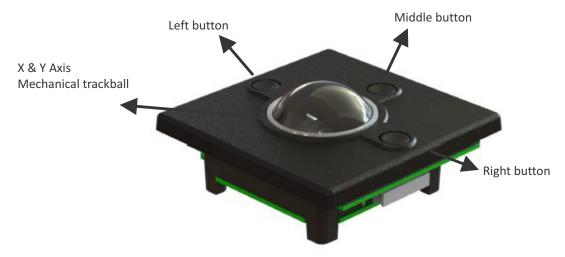
ESD 15kV air-discharge and 6kV contact discharge (IEC 61000-4-2)
EMC Radiated immunity - limits according to level 3 of IEC 61000-4-3

Radiated emissions to EN55022 class B

Sealing rating IP65 (BS EN 60529)



TRACKBALL FEATURES



CONNECTION DETAILS

Connection is made to the trackball by means of a single latching Molex Spox™ connector (or equivalent).

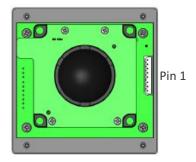
Output connector: CON 1

Description : 8 Way Molex, vertical header, 5267 series

Manufacturer : Molex
Part No : 0022035085

Mating connector: 8 Way Spox[™], Wire-to-Board, Friction Lock,

Molex part: 0050375083



| Pin Number | USB & PS/2 |
|------------|--------------------|
| 1 | N/C |
| 2 | N/C |
| 3 | N/C |
| 4 | N/C |
| 5 | + DATA/ PS/2 CLOCK |
| 6 | - DATA/PS/2 DATA |
| 7 | +5V |
| 8 | 0V GND |

TRACKBALL CONFIGURATION

Ballistic Tracking Mode: The trackball firmware incorporates an Intuitive tracking algorithm to provide increased cursor resolution when tracking fast whilst retaining the original resolution for tracking accurately at slow speeds.



TRACKBALL FEATURES