

GK50 Series TRACKBALL

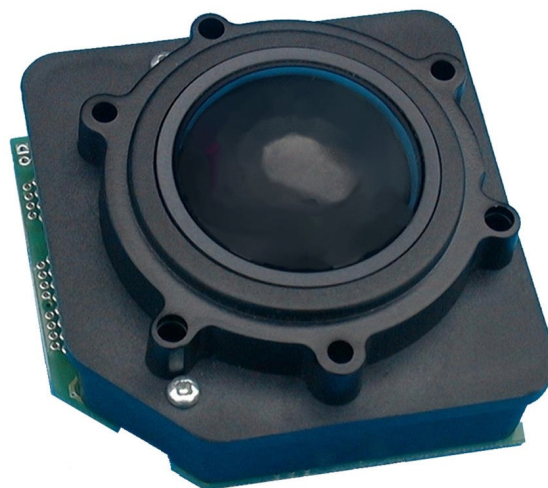
TRACKERBALL FOR REAR-PANEL MOUNT

Phase quadrature output
Direct PS/2 or USB output
Sealing IP65 (static)

• GENERAL DESCRIPTION

The GK50 is a high specification keyboard or panel mounted trackerball. It is constructed from a glass loaded PBT chassis and benefits from its **large diameter shafts** for smooth running.

The GK50 is sealed to **IP65** static (ball in rest). Designed to be panel mounted as part of OEM systems, the GK50 is ideal for demanding applications such as medical equipment, process control, air traffic control and ruggedised keyboards.



• CONNECTIVITY

The **GK50-4502** is **PS/2** compatible.

The **GK50-4602** can be plugged into any **USB** port or hub.

A shielded straight output cable of 1,6mm long is supplied with these two types.

The **GK50-4002** has **phase quadrature output**: X1(Y1) leads X2(Y2) when motion of ball in positive X(Y) direction.

No device driver is supplied with the unit. Please use standard available drivers in your operating system.

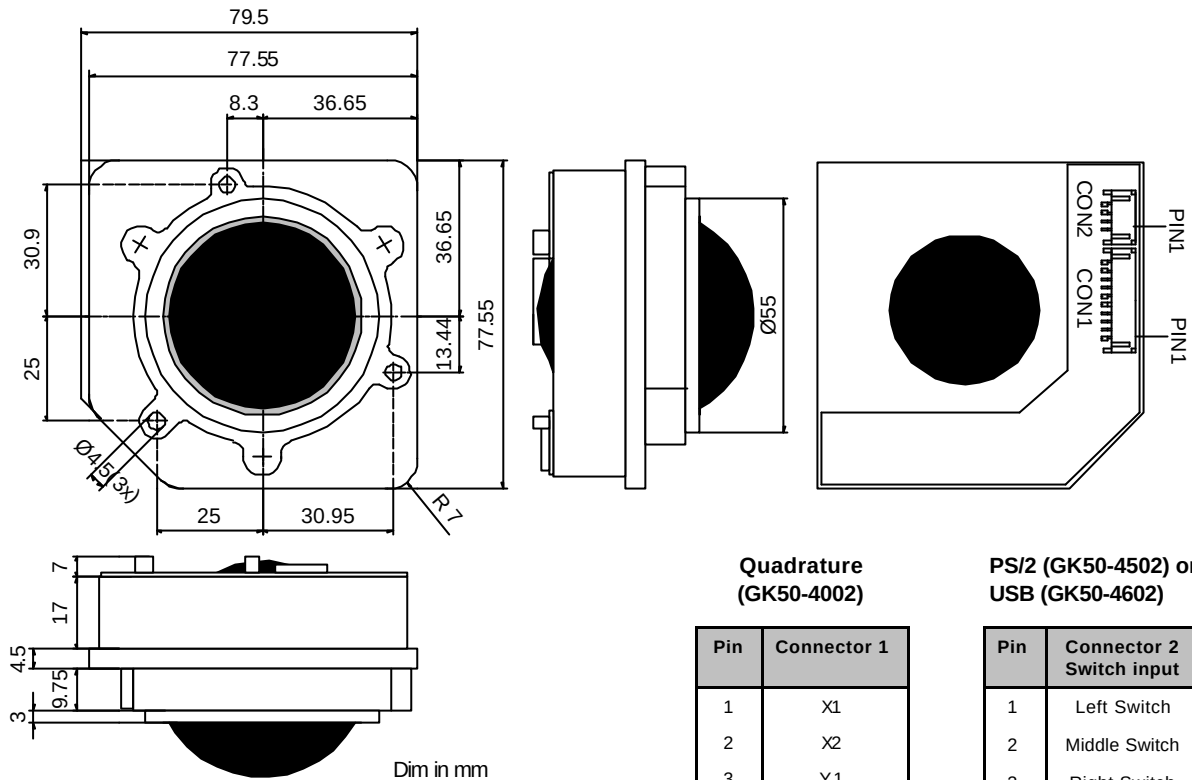
** Due to the increasing differences of the mouse port specifications of the various PC manufacturers, we do recommend that this unit should be tested on the final PC configuration and operating system prior to installing it in series.*

• SPECIFICATIONS

Casing material	Glass loaded PBT.
Top plate material	ABS.
Ball material	Phenolic resin.
Ball colour	Black.
Ball diameter	50,8 mm.
Weight	270 grams.
Seal material	PTFE.
Shaft diameter	9,5 mm.
Tracking force :	50 grams nominal.
Resolution	155 pulses per ball revolution .
Mounting angle	Max. 90° to horizontal plane.
Sealing	IP65 (static)
Lifetime - Ball revolutions	> 2 million.
Supply voltage (GK50-4002)	5 Vdc +/- 5%.
Supply current (GK50-4002)	6 mA typ.
Storage temperature	-25°C to +80°C.
Operating temperature	0°C to +55°C.
Relative humidity	95% non-condensing.
Vibration	5G, 5-2KHz any plane.

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• DIMENSIONAL DRAWING



Connector type CON1, CON2 : JST PH Series 2,0mm pitch.
 Mating part to connector CON1, CON2: JST KR Series 2,0mm pitch.
 Type numbers: 04KR-8M (CON2), 10KR-8M(CON1)

Quadrature (GK50-4002)

Pin	Connector 1
1	X1
2	X2
3	Y1
4	Y2
5	-
6	-
7	Vcc
8	-
9	-
10	GND

PS/2 (GK50-4502) or USB (GK50-4602)

Pin	Connector 2 Switch input
1	Left Switch
2	Middle Switch
3	Right Switch
4	GND

• ORDERING INFO

Description	Order Number
Trackball Quadrature Output supplied with : - interconnection cable (10 wires) to connect to CON1	GK50-4002
Trackball PS/2 Output supplied with : - shielded cable 1,6 m long with 6 pin mini DIN plug to connect to CON1 - cable (4 wires) to connect up to 3 external switches to CON2	GK50-4502
Trackball USB Output supplied with : - shielded cable 1,6 m long, USB type A connector to connect to CON1 - cable (4 wires) to connect up to 3 external switches to CON2	GK50-4602



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