

50 mm TRACKBALLMODULE

TRACKBALL FOR REAR PANEL MOUNTING

Sealing IP65 (static); PS/2, USB or phase quadrature output

The GK50 is a high specification keyboard or panel mounted trackball. 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.



GK50-XXXX

• SPECIFICATIONS

Sealing	IP65 (static)	Mounting angle	Max. 90° to horizontal plane
Casing material	Glass loaded PBT	Lifetime - Ball revolutions	> 2 million
Top plate material	ABS	Supply voltage (GK50-4002)	5 Vdc +/- 5%
Ball material	Phenolic resin	Supply current (GK50-4002)	6 mA typ
Ball colour	Black	Storage temperature	-25°C to +80°C
Ball diameter	50,8 mm	Operating temperature	-10°C to +60°C
Weight	270 grams	Relative humidity	95% non-condensing
Seal material	PTFE	Vibration	5G, 5-2KHz any plane
Shaft diameter	9,5 mm		
Tracking force	50 grams nominal		

• CONNECTIVITY

The **GK50-4502** is **PS/2** compatible. The **GK50-4602** can be plugged into any **USB** port or hub. Both types are supplied with 1,6m long shielded straight cables and external switch cables.

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. It is supplied with a 10-way connection cable of 35 cm.

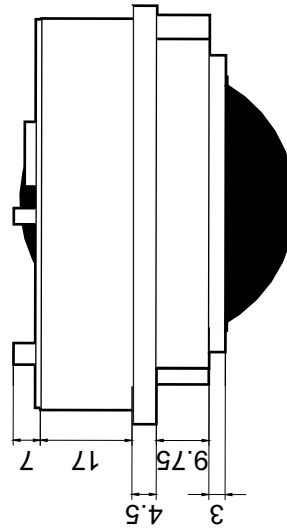
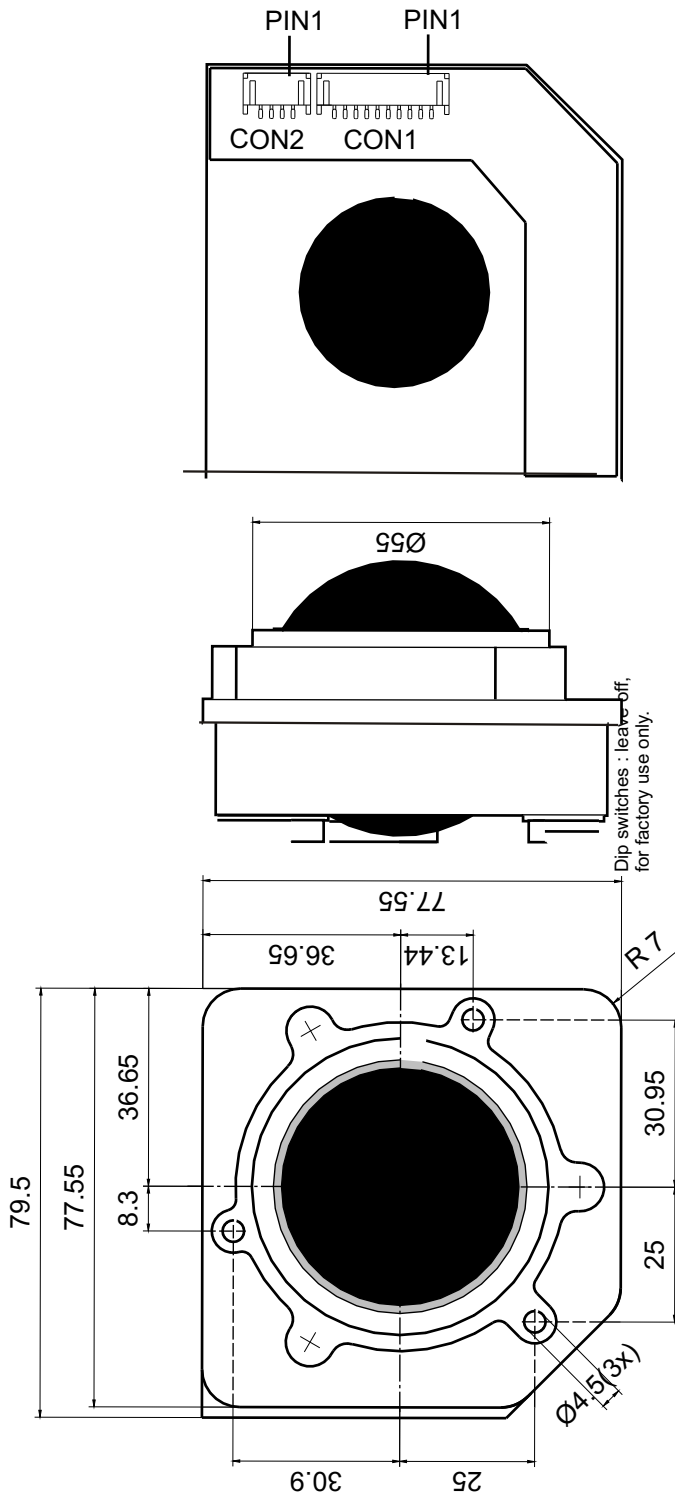
** Due to the increasing differences of the mouse port specifications of the various PC manufacturers, we do recommend that this unit should be tested on the final PC configuration and operating system prior to installing it in series.*

• ORDERING INFO

Output	Order Number	Consisting of :
Quadrature	GK50-4002	P50-500230 Trackball module only IC101035 : 35 cm interconnection cable to CON 1
PS/2	GK50-4502	P50-560230 : Trackball module only OC6010160 : 1,6 m shielded cable with 6 pin mini DIN plug IC040035 : 35 cm switch cable (4 wires) to CON2
USB	GK50-4602	P50-560230 : Trackball module only OC5010160 : 1,6 m shielded cable with USB type A plug IC040035 : 35 cm switch cable (4 wires) to CON2

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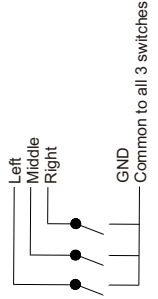
• DIMENSIONAL DRAWING



4 way connector (CON2)
For PS/2 & USB only

Pin	Switch Input
1	Left Switch
2	Middle Switch
3	Right Switch
4	GND

Connector type : JST PH Series 2.0mm pitch.
Mating connector : JST KR Series 2.0mm pitch.



10 way connector (CON1)

Pin	Quadrature	PS/2 or USB
1	X1	X1
2	X2	X2
3	Y1	Y1
4	Y2	Y2
5	-	-
6	-	Vcc
7	Vcc	Data/D-
8	-	CLK/D+
9	-	GND
10	GND	

Connector type : JST PH Series 2.0mm pitch.
Mating connector : JST KR Series 2.0mm pitch.

Dip switches : leave off,
for factory use only.

Dim in mm.

The company reserves the right to alter without prior knowledge the specification or design of any standard product or service.



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