



- 50 mm ball
- IP65 sealing

50 MM OEM TRACKBALLMODULE

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 ruggedized keyboards.

GENERAL TECHNICAL SPECIFICATIONS

Sealing	: IP65 (static)
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
Mounting angle	: Max. 90° to horizontal plane
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	: -10°C to +60°C
Relative humidity	: 93% non-condensing
Vibration	: 5G, 5-2KHz any plane

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.

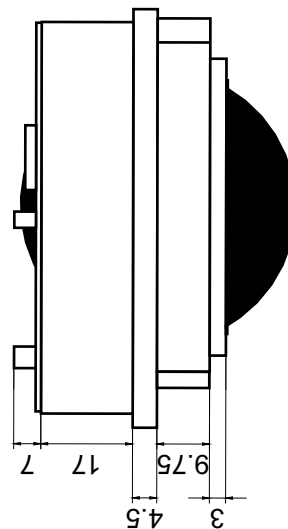
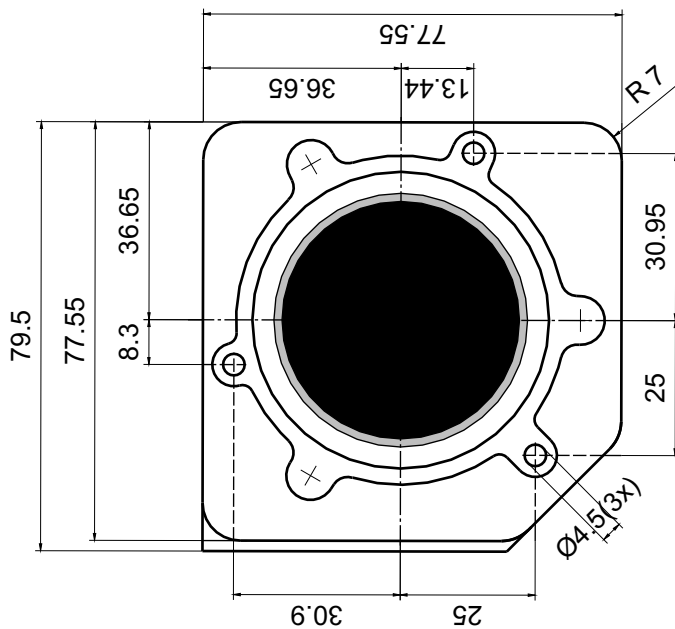
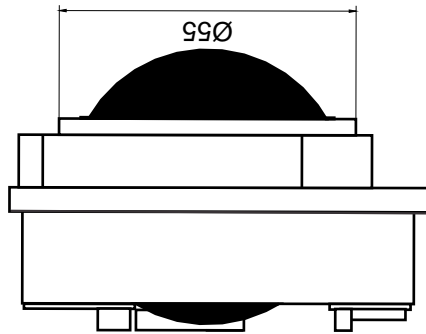
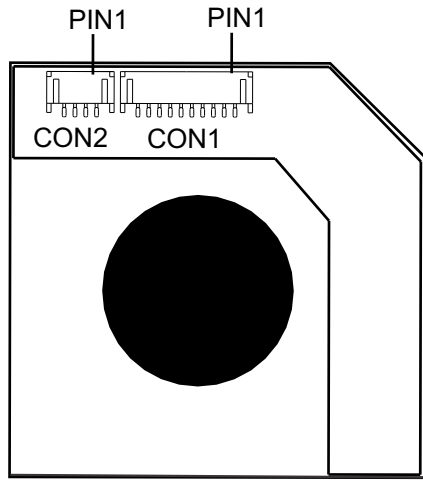
The GK50-4002 has phase quadrature output: X1(Y1) leads X2(Y2) when motion of ball in positive X(Y) direction. No device driver is supplied with the unit. Please use standard available drivers in your operating system. It is supplied with a 10-way connection cable of 35 cm.

* 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.

ORDER 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 PS/2 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

DIMENSIONAL DRAWING



Dip switches : leave off, for factory use only.

10 way connector (CON1)

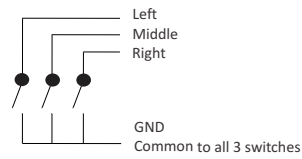
Pin	Quadrature	PS/2 or USB
1	X1	-
2	X2	-
3	Y1	-
4	Y2	-
5	-	EARTH
6	-	-
7	Vcc	Vcc
8	-	Data/D-
9	-	CLK/D+
10	GND	GND

Connector type : JST PH Series 2,0mm pitch.
Mating connector : JST KR Series 2,0mm pitch.

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.



Dim in mm.

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