

# 25 mm STAINLESS STEEL TRACKBALL

## COMPACT TRACKBALL FOR REAR PANEL MOUNTING

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

### • GENERAL DESCRIPTION

The GS25 series are ruggedised professional trackballs. The ball and the top flange are made of quality stainless steel. The double-sided seal ring provides sealing to **IP65** static (ball in rest). Stainless steel shafts and bearings ensure a solid and precise pointer control.

The unit has been designed to be back of panel mounted as part of OEM keyboards and consoles. The GS25 is an ideal pointing device for applications with restricted mounting space.



### • SPECIFICATIONS

|                            |                                     |                            |                                                                                                |
|----------------------------|-------------------------------------|----------------------------|------------------------------------------------------------------------------------------------|
| Sealing                    | IP65 (static)                       | Supply voltage (GS25-4002) | 5 Vdc +/- 5%                                                                                   |
| Casing material            | Polycarbonate                       | Supply current (GS25-4002) | 6 mA Typ                                                                                       |
| Top flange material        | AISI 316 Stainless steel            | Storage temperature        | -25°C to +80°C                                                                                 |
| Ball material              | AISI 440 Stainless steel (magnetic) | Operating temperature      | 0°C to +55°C                                                                                   |
| Ball diameter              | 25 mm                               | Relative humidity          | 95% non-condensing                                                                             |
| Weight                     | 100 grams                           | Vibration                  | 5G, 5-2KHz any plane                                                                           |
| Seal material              | PTFE Composite                      |                            |                                                                                                |
| Shaft diameter             | 4,5 mm                              | ESD                        | in excess of 8kV air-discharge and 2kV contact discharge (when ESD protection pin is grounded) |
| Tracking force             | 65 grams nominal                    |                            |                                                                                                |
| Mounting angle             | Max. 60° to horizontal plane        |                            |                                                                                                |
| Lifetime -Ball revolutions | > 2 million                         |                            |                                                                                                |

### • CONNECTIVITY

The **GS25-5502** is **PS/2** compatible. The **GS25-5602** 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 **GS25-5002** has **phase quadrature output**: X1(Y1) leads X2(Y2) when motion of ball in positive X(Y) direction. It is supplied with a 6-wire connection cable of 35 cm.

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

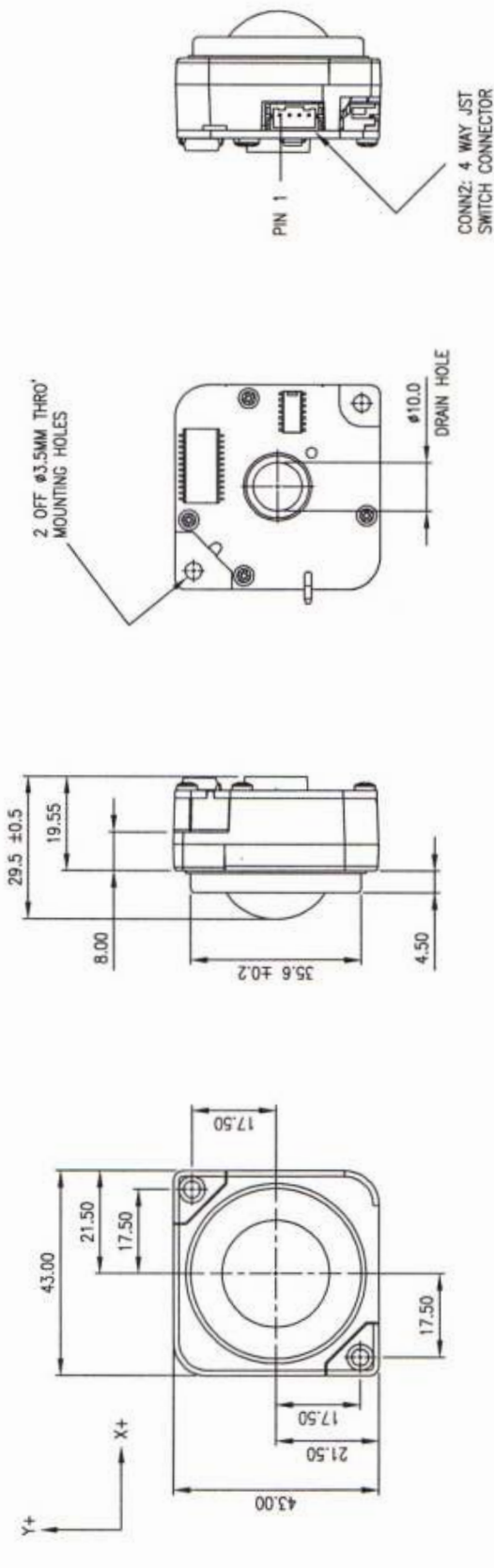
\* Due to the increasing differences of the mouse port specifications of the various PC manufacturers, we do recommend that this unit should be tested on the final PC configuration and operating system prior to installing it in series.

### • ORDERING INFO

| Output     | Order Number     | Consisting of :                                                                                                                                                |
|------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Quadrature | <b>GS25-5002</b> | P25-5002CC : Trackball module only, incl. trim<br>IC060635 : 35 cm interconnection cable to CON 1                                                              |
| PS/2       | <b>GS25-5502</b> | P25-5602CC : Trackball module only, incl. trim<br>OC6006160 : 1,6 m shielded cable with 6 pin mini DIN plug<br>IC040035 : 35 cm switch cable (4 wires) to CON2 |
| USB        | <b>GS25-5602</b> | P25-5602CC : Trackball module only, incl. Trim<br>OC5006160 : 1,6 m shielded cable with USB type A plug<br>IC040035 : 35 cm switch cable (4 wires) to CON2     |

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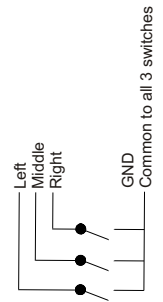
## • DIMENSIONAL DRAWING



4 way connector (CON2)

| 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         | N.C         |
| 2   | X2         | N.C         |
| 3   | +5VDC      | +5VDC       |
| 4   | Y1         | D-/Data     |
| 5   | Y2         | D+/Clock    |
| 6   | GND        | GND         |

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

Dim in mm



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**GS25-5x02**