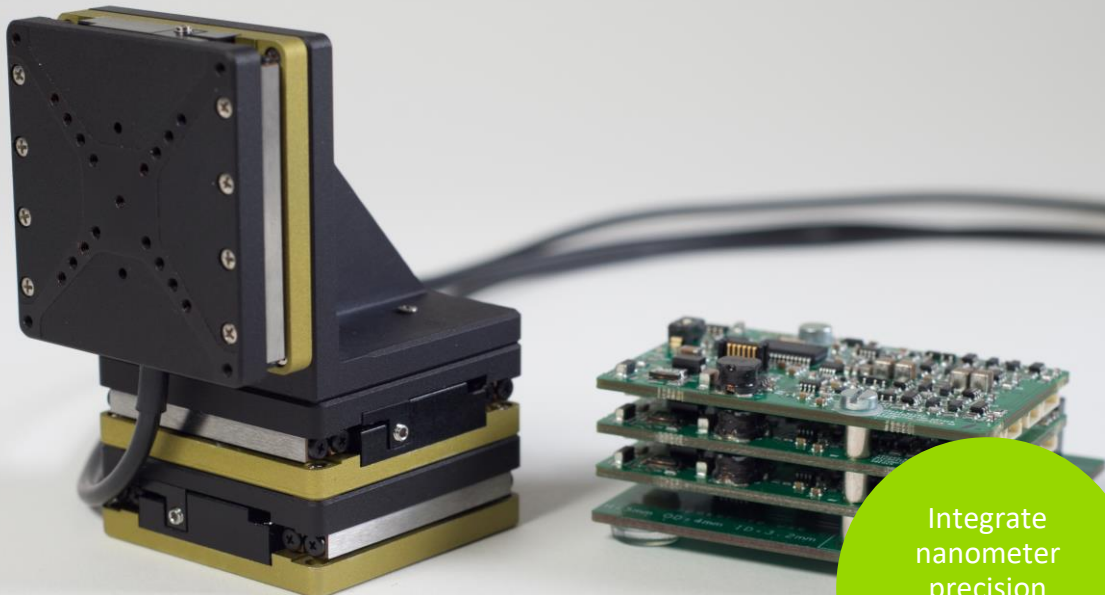


GO

Integrate
nanometer
precision
stages into
your product

PRECIBEO GO OEM

Fast & Simple OEM Integration

Nanometer Precision over Centimeter Distances

The PRECIBEO GO OEM System allows you to easily move an object from A to B with nanometer precision over centimeter distances. The system is designed for delivering the precision, load capacity and ease of use needed for fast and simple integration into compact OEM solutions.

The high precision linear stages has an operating force of 5 N, lifting up to 500 grams at more than 5 mm/s. The stages provide smooth motion, fast step & settling times and are self-locking at rest, allowing you to hold position when power is off.

Get Started with the Development Kit

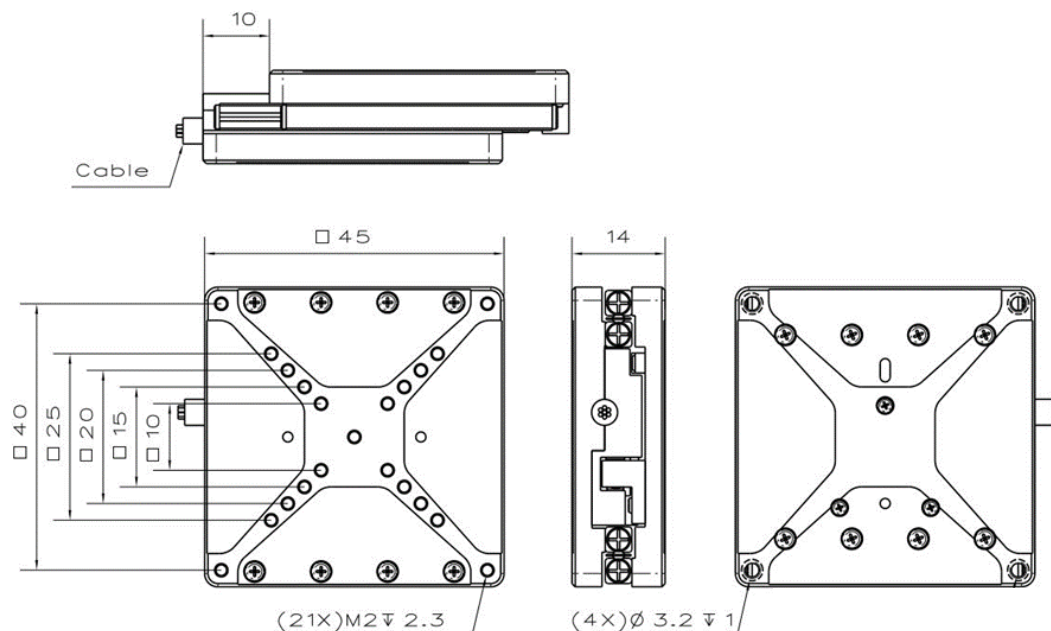
Integrate one or more stages into your product and control the stages simultaneously with easy to use commands. For instance, to reach the position (x=1000, y=100, z=0.010) μm in a 3-stage system, simply send the GoTo command "GT x1000 y100 z0.01".

Get started with the GO Command App and the Development Kit, where the D1E Mini Controller Board is stacked on a D1E Breakout Board with Power Supply and USB Cable. Just plug the Power Supply into the wall socket and the USB cable into your computer and you are ready to GO!

Modular Multi Axis System for Integration

- 5 N Push / Pull Force
- Lifts up to 0,5 kg at >5 mm/s
- Fast Step & Settling Times
- Point-to-Point Motion with PID
- Trapezoidal Velocity Profiles
- Smooth Continuous Motion





Technical Specification

MODEL	GO STAGE LLS4545 OEM
POSITIONING	
TRAVEL (X)	20 mm (Stages with longer travel are available on request)
POSITION SENSOR	Optical Encoder
SENSOR RESOLUTION	2 nm
MIN INCREMENTAL MOTION	2 nm
BIDIRECTIONAL REPEATABILITY	+/- 100 nm (typ. @ +/- 10mm travel)
STRAIGHTNESS & FLATNESS	+/- 2 µm (typ.)
PITCH	+/- 150 µrad (typ.)
YAW	+/- 150 µrad (typ.)
MOTION	
MAX OPERATING FORCE (PUSH / PULL)	5 N (min.)
HOLDING FORCE (WHEN POWER IS OFF)	6 N (min.)
MAX SPEED (AT NO LOAD)	8 mm/s
MAX SPEED (AT MAX OPERATING FORCE)	5 mm/s (min.)
DRIVE TYPE	
MOTOR TYPE	Piezo Drive
MECHANICAL	
MAX LOAD (IN X,Y OR Z DIRECTION)	0,5 kg
GUIDE TYPE	Crossed Roller Bearings
SIZE	45x45x14 mm
WEIGHT (W/O CABLE & CONNECTOR)	75 g (+/-10%)
CONNECTIONS	
CABLE	2 m cable (+/-5%)
CONTROLLER	D1E Mini Controller Board
MISCELLANEOUS	
OPERATING TEMPERATURE	0-50 °C
MATERIAL	Aluminum

MODEL	D1E MINI CONTROLLER BOARD
OPERATION AXES COMMAND SET COMMUNICATION INTERFACE CONNECTIONS BOARD TO BOARD POWER AND RS485 CONNECTOR STAGE CABLE CONNECTOR MISCELLANEOUS OPERATING TEMPERATURE OVERHEAT PROTECTION POWER SUPPLY SIZE	1 board controls one axis PRECIBEO ASCII Rapid RS485 (ASCII Commands, 115.2 kbps) 6-pole, ERNI MicroStac 114711 iX-Industrial (via iX-Industrial adapter cable) 0-50 °C Motion Stopped at 75 °C 48 VDC, 5W (48 VDC +-5%) 39x59x10 mm

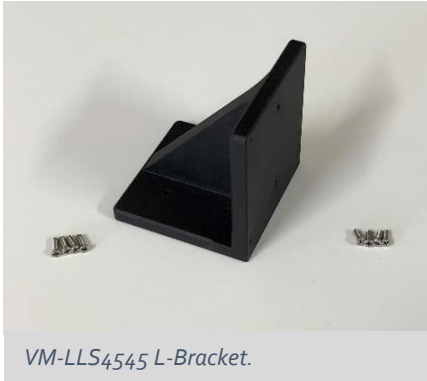
MODEL	D1E BREAK OUT BOARD
CONNECTIONS BOARD TO BOARD POWER AND RS485 CONNECTOR CABLE TO BOARD POWER CONNECTOR CABLE TO BOARD RS485 CONNECTOR CABLE TO BOARD USB CONNECTOR CABLE TO BOARD POWER CONNECTOR MISCELLANEOUS OPERATING TEMPERATURE POWER SUPPLY SIZE	6-pole, ERNI MicroStac 114711 (for controller boards) 2-pole, Phoenix Contact PTSM 0,5/ 3-HH-2,5-THR R32 3-pole, Phoenix Contact PTSM 0,5/ 3-HH-2,5-THR R32 USB-C (for RS485 via USB to RS485 converter) Power Jack P1J 2.1x5.5 mm 0-50 °C 48 VDC, 20W (48 VDC +-5%) 63x59x18 mm



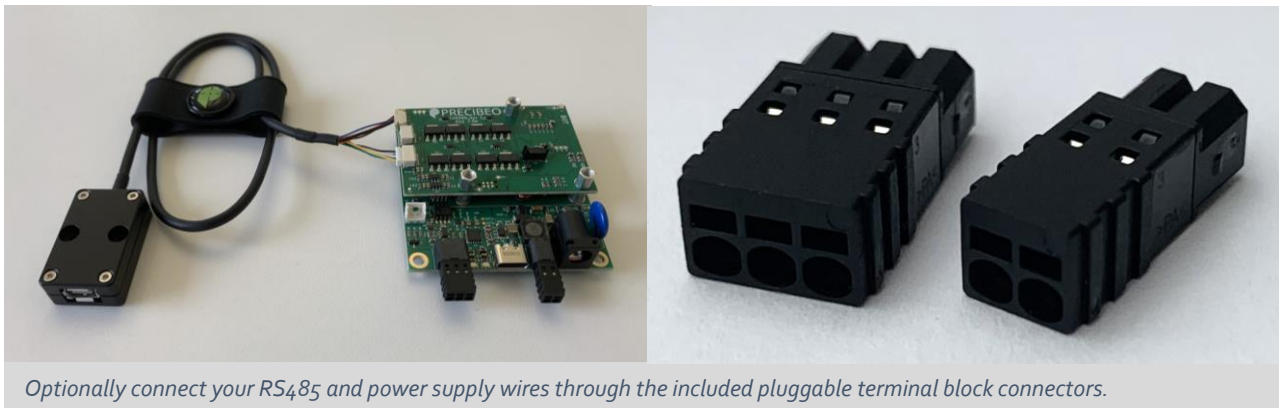
OE-DKLLS4545 GO OEM Development Kit.



OE-ASLLS4545 Additional Stage Kit.



VM-LLS4545 L-Bracket.



Optionally connect your RS485 and power supply wires through the included pluggable terminal block connectors.

Order Information

Please contact us by phone (+46 18 700 13 40) or email (sales@precibeo.com) for any enquiries.

PRODUCT	DESCRIPTION
OE-DKLLS4545	Development Kit including: <ul style="list-style-type: none"> • One GO Stage LLS4545 OEM with Cable • One D1E Breakout Board with Power Supply and USB Cable • One stackable D1E Mini Controller Board mounted on the Breakout Board
OE-ASLLS4545	Additional Stage Kit including: <ul style="list-style-type: none"> • One GO Stage LLS4545 OEM with Cable • One stackable D1E Mini Controller Board with spacers for stacking • 4 M2 screws for mounting two stages together (e.g. XY-configuration)
VM-LLS4545	One L-Bracket for vertical mounting of the stages, e.g. YZ-configuration, including: <ul style="list-style-type: none"> • 8 M2 screws for mounting two stages to the L-Bracket.
OE-D1EBOB	D1E Break Out Board including: <ul style="list-style-type: none"> • One D1E Breakout Board with Power Supply and USB Cable • 3 spacers for stacking
OE-D1EMCB	D1E Mini Controller Board including: <ul style="list-style-type: none"> • One stackable D1E Mini Controller Board with iX-Industrial Adapter Cable • 3 spacers for stacking

Disclaimer: Specifications of the product do not constitute a warranty of the properties. They are intended for information purposes only and are subject to change.