



hand-held scan device

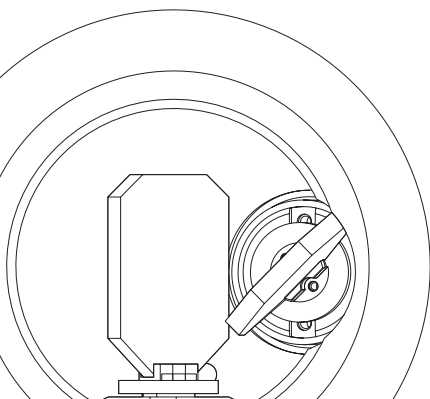
The palmSCAN's ultra-compact dimensions make this **scan system** especially suitable for hand-held laser systems. Its ergonomic design and light weight ensure natural, fatigue-free handling. The palmSCAN is primarily destined for dermatological applications such as wrinkle reduction, hair removal and vascular treatment.

Two high-performance galvanometer scanners, optimized for small apertures, enable fast and precise guidance and positioning of the laser beam – a must for uniform application of laser energy over large surface areas.

The palmSCAN is equipped with a 6 mm clear aperture and can be delivered with mirror coatings for all typical laser wavelengths. This OEM subsystem is designed for straight-forward integration into existing systems. Standardized threads facilitate mounting on articulated arms or attachment of a fiber collimation optic, as well as additional customer-specific components at the beam exit.

Typical Applications:

- Wrinkle reduction
- Hair removal
- Vascular treatment



Housing

The compact, light-alloy housing is easily cleaned and disinfected.

Mounting

The palmSCAN provides several standardized threads for mounting an optical guidance system (e.g. an articulated arm or an optical fiber).

A customer-specified optics adapter for focusing the laser beam can be integrated into the system. At the beam exit, a spacer can be mounted to ensure the correct working distance.

Mirrors

Optimized mirror sets are available for various laser types (e.g. Er:YAG, CO₂ or Nd:YAG).

Control

The palmSCAN is delivered with two servo amplifier boards and an optional digital interface board that allows the palmSCAN to be controlled by RTC control boards.

Specifications

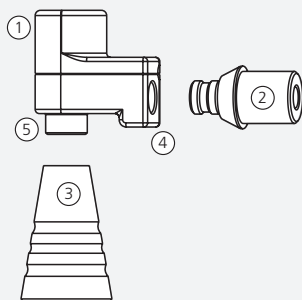
(all angles are in optical degrees)

Aperture	6 mm
Step response time (settling to 1/1000 of full scale)	
1% of full scale	0.35 ms
10% of full scale	0.90 ms
Dynamic performance	
Tracking error	0.14 ms
Optical performance	
Typical scan angle	±0.10 rad
Gain error	< 5 mrad
Zero offset	< 5 mrad
Nonlinearity	< 4.2 mrad / 44°
Power requirements	±(15 + 1.5) V DC, max. 0.5 A each
Input signals	
Analog version	alternatively: ±4.8 V; ±9.6 V; ±4.8 mA; ±9.6 mA
Digital version	XY2-100 standard
Output signals	3 status signals per axis
Analog version	TTL level
Digital version	XY2-100 standard
Weight	
palmSCAN	approx. 200 g
SSV30 servo amplifier boards	approx. 190 g each
SDIREC digital interface board	approx. 150 g
Operating temperature	25 °C ± 10 °C

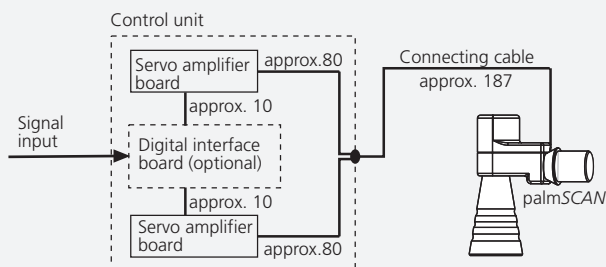
Components

- 1 palmSCAN
- 2 Optics adapter*
- 3 Spacer*
- 4 Beam in
- 5 Beam out

* not included



Control



Dimensions

- 6 Thread for mounting a spacer
 - 7 Thread for mounting an optics adapter / articulated arm
 - 8 Outlet for cable
- all dimensions in mm

