



More Information at:



hand-held scan device

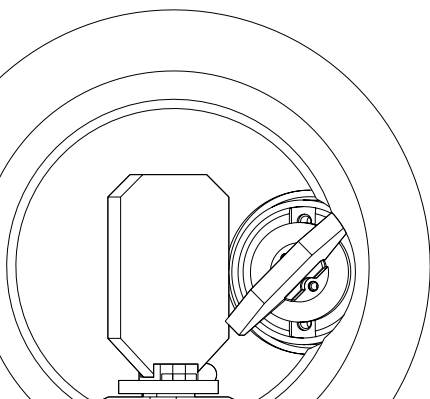
The palmSCAN's ultra-compact dimensions make this **scan system** especially suitable for hand-held laser systems. Its ergonomic design and light weight ensure natural, fatigue-free handling. The palmSCAN is primarily destined for dermatological applications such as wrinkle reduction, hair removal and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

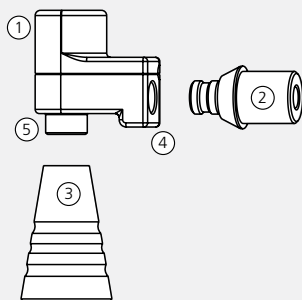
(all angles are in optical degrees)

Aperture	6 mm
Step response time (settling to 1/1000 of full scale)	
1% of full scale	0.60 ms
10% of full scale	1.20 ms
Dynamic performance	
Tracking error	0.25 ms
Repeatability	< 50 µrad
Optical performance	
Typical scan angle	±0.10 rad
Gain error	< 5 mrad
Zero offset	< 5 mrad
Nonlinearity	< 4.2 mrad
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

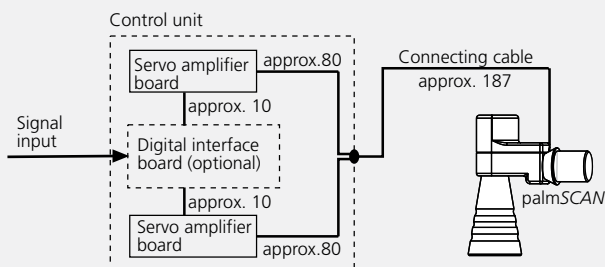
Components

- 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

