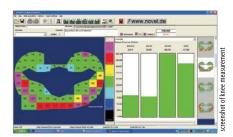# pliance® system

The pliance® electronic analyzer connects up to 1024 sensors to a desktop, notebook PC or Windows smartphone. Collected data can be stored on a SD flash card or transmitted online to a PC or Pocket PC (PDA) via the built-in telemetry.

pliance®

Technical data for pliance®

dimensions (mm)	150 x 100 x 40
weight (g)	360
number of sensors (max)	1024
measurement frequency	20,000 sensors/second
storage type	2 GB external SD card
operating system	Windows
power supply	NiMH battery, 4,5 hours
computer interface	fiber optic/USB and Bluetooth™
sync option	fiber optic/TTL, in and out
telemetry	Bluetooth™
wireless remote ctrl.	FM

pliance® software

screenshot of knee measurement

The software is written for Windows operating systems. It is user friendly and contains many useful options for fast pressure data collection, analysis and data presentation. It is embedded in the novel scientific analysis programs and databases.

pliance® sensors

Features of pliance® sensors:

- elastic
- highly compliant
- thin
- calibrated
- accurate
- reproducible
- low hysteresis
- low temperature effect
- water protection optional
- sterilizable
- custom designable

3D deformation of sensor mat

trublu® calibration device

With the aid of the trublu® calibration device, all sensors are individually and simultaneously calibrated with homogeneous air pressure. Calibration guarantees accurate and reproducible data collection. Calibration systems are available in various sizes.

trublu® calibration device with S 2041 IOP mat

pliance®

sensors

art science®

novel.de

Introduction

The pliance® sensor family has been developed by novel for the special needs of researchers and clinicians. Using its long experience in pressure distribution measurement and its know-how, novel is able to develop custom sensor designs to meet customer needs.

The basis of the novel system is capacitive sensor technology. All sensors are individually calibrated and provide accurate and reliable pressure data.

Standard sensors are available in various shapes and sizes. They can be configured as single sensors or arranged in a matrix to fit different measuring surfaces. Various pressure ranges can be achieved as well as various sensor thickness from 0,3 mm to 1,3 mm without coating.

Flexibility and elasticity are two of the relevant characteristics of novel sensors. Proper material selection and design give novel sensors the ability to conform around highly contoured sites without wrinkling.

tool sensor

S2011 single sensor

An assortment of coatings can be applied to novel sensors. Some novel sensors can be sterilised and utilised in physiological environments in vitro and in vivo during surgical procedure.

Product ID	Name	Sensing Area (mm²)	Number of sensors
S 2001	RLS sensor	20 x 20	4 x 4
S 2003	socket sensor XL	40 x 40	4 x 4
S 2006	strip sensor	10 x 100	1 x 10
S 2007	long strip sensor	160 x 8	10 x 3
S 2008	4 x 4 strip sensor	32 x 10,67	4 x 4
S 2011	single sensor ⌀10	78,5	1
S 2015	kneepad D	43 x 43	16 x 16
S 2016	pedoped® Diro	40,64 x 40,64	16 x 16

S2011 single sensor in liquid

S2015 knee sensor

Product ID	Name	Sensing Area (mm²)	Number of sensors
S 2018	hand wrist sensor	533	4 x 10
S 2019	bike saddle mat	286.8 x 286.8	234
S 2022	elastisens® HA 78	125 x 125	16 x 16
S 2024	elastisens® FO 44	70.4 x 70.4	16 x 16
S 2027	pliance sensor mat 392	392 x 392	16 x 16
S 2034	pliance sensor mat HW	248 x 752 (each mat)	16 x 16

S2018 hand wrist sensorfluoroscopy

S2018 hand wrist sensor

Product ID	Name	Sensing Area (mm²)	Number of sensors
S 2035	elastisens®HA135	216 x 216	16 x 16
S 2037	elastisens® ES1024-160-5	160 x 160	32 x 32
S 2039	patella sensor	1988	85
S 2041	IOP mat	160 x 320	32 x 32
S 2042	st sensor	28 x 45	194

S2019 bike sensor

S2097 facet joint sensor

Product ID	Name	Sensing Area (mm²)	Number of sensors
S 2059	glove male	17600	176
S 2060	pen sensor	38 x 120	88
S 2062	finger mat	125 x 125	12 x 12
S 2064	elastisens® ES 64-54/216-14	54 x 216	4 x 16
S 2075	elastisens® ES256-160-10	160 x 160	16 x 16
S 2084	pliance bed mat	640 x 1280	32 x 64
S 2085	elastisens®ES 256-108/432-135	432 x 108	32 x 8
S 2097	facet joint sensor	315	55

S2085 seat belt sensor

S2022 body sensor