− best practice.
diagnostics − therapy − prophylaxis

Innovative specialty devices that make sense.
pa-on™

Periodontal status: Faster, standardized and fully software-integrated.

The first periometer for the fully automated assessment of periodontal status.

Periodontal status made easy. The periodontal status is part of regular patient findings and continues to be collected more and more often within the scope of dental hygiene. You can recognize periodontal diseases early and minimize their risks.

pa-on simplifies and standardizes the recording of the periodontal status. The measurement results are immediately visible in the periodontal chart.

**automated and controlled measurement.** With the pa-on, measurements of the periodontal status are carried out automatically with software support. Significant advantages: assistance is no longer needed to document the measurement results.

**completely integrated into the practice software.** The measurement results are transferred directly into the byzz Paro or accounting software. It is no longer necessary to manually record the measurement results; the findings are immediately visualized in the periodontal chart.

**standardized measurements.** – always precise with 20 g of pressure. The hygienic disposable measuring tip is calibrated so that pocket depth measurement always occurs with 20 g of pressure. This provides precise, standardized and delegable results - even with different operators. The patient experiences no pain while the periodontal status is recorded.

**Measurement procedure as usual.** All common measurement procedures can be set via the software, e.g., number of measurement points per tooth, recession, bleeding index – so the practice doesn't have to change its usual procedures. The measurement procedures can be saved individually per user. The data collected are transferred automatically from the docking station to the software and visualized for patient consultation.

> byzzParo Software

– best practice.
diagnostics – therapy – prophylaxis
**>> PERIOdisiacal**

**QUICK ONE STEP CALIBRATION**
Before starting measurement procedure, the measuring tip must be pressed once to the zero point. The probe confirms with a short beep that you are ready.

**INDIVIDUAL MEASUREMENT PROCEDURE**
You can set your desired measurement procedure individually in the software [measurement sequence / number of measurement points / etc.]

**STERILE DISPOSABLE TIP**
Painless, calibrated measurement with precisely 20 g of pressure

**ERGONOMIC AND WIRELESS**
Thanks to the fully automated lightweight handpiece, your precisely measured values are saved.

**EASY TO OPERATE**
The actual measurements are performed by the probe itself. Additional information such as the bleeding index can be directly recorded along with the measurements.

**ALWAYS UP TO DATE AND READY**
Once on the docking station while charging, all measurements are transferred to the PC.

**DIRECT CONNECTION TO THE PRACTICE SOFTWARE**
>> to your own software
>> or integration via byzzParo

**DISPLAY / FEEDBACK**
Optically and acoustically supported measurements. All data are automatically transferred to your software and displayed.

**Example measurement**

**Sleeve with attachment loss.**

**Sleeve with pocket depth measurement.**
Efficient
caries management.

Advanced technology for precise and reliable caries detection.

60% of all carious lesions are not recognized in the dental office! Especially within the framework of preventative measures for children, youth or known risk groups, early caries diagnosis/treatment is recommended - ideally without x-ray exposure. CarieScan PRO is verifiably the most precise and reliable device for caries detection, even with hidden caries.

- The use of CarieScan PRO is quick and easy. The tooth is dried with air and then the CarieScan PRO is set on the tooth like a probe. The measurement begins automatically and you can see the results within 2 seconds.

- 94.8% precision in caries detection while minimizing „false positives“ [< 7%] [verified in numerous scientific studies]. A significant improvement over the use of fluorescence methods for detecting caries.

- pain-free, radiation-free, reliable early detection of caries and precise process control of the introduced preventative measures with the help of CarieScan software [PC and Mac].

- improved patient relationships thanks to exceptional diagnosis together with an increased preventative standard.

- Expansion of private billing options for prevention, e.g., by shortening the recall cycle. With CarieScan, caries detection can be reliably delegated.

CarieScan PRO uses the AC impedance spectroscopy measurement method. For this, imperceptible alternating current pulses with different frequencies are emitted and the resistance of the tooth is measured. Even small, difficult to detect carious defects can be reliably identified. CarieScan Pro can also be used during orthodontic treatments with brackets or bands.

Only available in Germany, Austria, Switzerland, Middle East and the CIS.
CARIESSCAN DIAGNOSIS

This information is given as an aid to diagnosis only and the final diagnosis and treatment plan should always be the clinician’s decision, also taking into account conventional methods of examination as well as patient risk factors.

Possible Treatment Options

100  Likelihood of Established Dentin Caries
Subject to patient profile, minimally invasive operative dentistry may be necessary. Any restoration should be as small as possible.
91-99  Intensive Preventive Care
Intensive caries prophylactic measures, or possibly operative intervention for the high caries risk patient.

51-90  Moderate Preventive Care
Usual caries prophylactic measures including fluoride varnish or pit & fissure sealants, with localized oral hygiene, diet advice and personalized review with monitoring at shorter intervals. Increasing values indicate a need for increasing intensity of preventive care.

1-50  Mild Preventive Care
Usual caries prophylactic measures including localized oral hygiene advice with use of fluoride toothpaste and review with monitoring over time.

LED COLOR DISPLAY™
Visualization of the results
LED-color display visible from both

LCD DISPLAY
Display of measurement results, system notifications
Selected tooth surfaces
Status display battery / Bluetooth

SENSOR
Highly precise measurements
Exact localization of the lesions
Sterile single-use
Prevention of cross infection

No calibration necessary
Sensor to measure approximal caries [under development]
smart-pad
LIGHT SAVING POCKETS, ROOTS AND IMPLANTS

Efficient disinfection of oral bacteria.

The photo-activated oral disinfection for all indications.

Oral bacteria: The root of all evil. Mechanical instrumentation alone is usually insufficient. The result: recurring, persistent inflammation, bleeding and the required repetition of extensive interventions. PAD kills 99.99% of all bacteria in the blink of an eye with a soft LED light and a photo-activated active ingredient.

>> using the smart-pad is quick, reliable and easy: apply the photo activated, non-staining active ingredient [medical grade tolonium chloride solution 12.7μg/ml] and activate with red LED light [635 nm]. Finished.

>> smart-pad disinfects effectively in all indications: the outer cell wall of the bacteria are selectively destroyed and 99.99% are quickly killed. Even with multiple uses, the bacteria develop no resistance. The application of antibiotics can also be omitted if desired.

>> time-saving and efficient – shorter treatment time, possible completion in just one sitting and can be delegated to the dental assistant.

Photo-activated disinfection with smart-pad makes the dental practice not only more efficient but also provides new therapy and billing options. You’re off and running.
INDICATIONS / APPLICATIONS:

>> PERIODONTICS
Preservation of supporting tissue with periodontal diseases without prescribing antibiotics / Alternative to open procedures

>> PERI-IMPLANTITIS
Preservation of expensive implants through complete disinfection of the implantation area prior to placing and, in the case of an infection, complete disinfection of the implant itself and the surrounding area

>> CARIES
Preservation of the hard tooth tissue with a minimally invasive process; supports natural remineralization

>> ENDODONTICS
Disinfection of the prepared root canal / root treatments possible in one sitting / reduction of chronic apical inflammation

>> the tolonium chloride binds selectively to the bacteria
>> Activation by the red LED releases the singlet oxygen [$^{1}\text{O}_2$]
>> $^{1}\text{O}_2$ destroys the cell membranes and kills the bacteria

the tolonium chloride binds selectively to the bacteria
Activation by the red LED releases the singlet oxygen [$^{1}\text{O}_2$]
$^{1}\text{O}_2$ destroys the cell membranes and kills the bacteria
Roots out germs.

The minimally invasive endodontic unit for a bacteria-free root canal.

Absolute sterilization of the root canal prior to filling is a prerequisite for a successful endodontic treatment. Rinse disinfection, laser or photo activated disinfection require maximum preparation of the root canal and have process-related weaknesses when disinfecting the lateral canal. endo-safe is a step ahead.

First scientific studies of the Johannes Gutenberg-University in Mainz, Germany, proof, that endo-safe increases the result of NaOCl rinse disinfection by factor 7-8x.

**endo-safe** provides **minimally invasive disinfection of the root canal** by emitting high-frequency pulses. Especially in the inaccessible lateral canals, where mechanical preparation is not possible, a controlled pulse emission provides the best possible disinfection option. The bacteria are killed thermally and by electromagnetic pulses. Highest proven sterilization in combination with NaOCl rinse disinfection.

**The integrated apex locator** securely limits the pulse emissions to the area of the root canal. In manual treatment mode, the doctor can precisely deliver the treatment pulses to the determined position. In automatic treatment mode, endo-safe assumes this task and automatically emits several pulses consecutively when the treatment needle moves in the direction of the apex.

A complex combination of several modulated pulse sequences desensitizes the nerves and ensures **low-pain therapy** - naturally in addition to the professional anesthesia provided by the dentist.

**endo-safe** is battery operated and can thus be **used portably**. It can simply and quickly be used in various treatment rooms and, thanks to its generously designed energy reserves, is ready for use for at least a week.

Available upon completion of CE Declaration of Conformity.
>> efficient and well designed

TOUCH SCREEN DISPLAY
for simple and quick device control.
Wipe disinfectable

APEX LOCATOR
with optical and acoustical indication of
distance to apex

CONTAMINATION-FREE
PLACEMENT
of the handpiece on the device

PATIENT ELECTRODE
Ergonomic design

FOOT SWITCH
to actuate
the treatment pulse

HANDPIECE / DENTIST ELECTRODE
for application in the root canal.
For sterilization, the dentist probe can
be separated from the plug connection

STERILE
TREATMENT NEEDLE
for single use
Intraoral x-rays should be quick, available directly at the chair and convincing with high diagnostic image quality. Costly and environmentally-unfriendly film development processes are a thing of the past. For the quality of a sensor, the optimum adjustment of all design components is decisive: shape, application instrument set, connectivity, sensor technology and software.

>> the **shape** provides ergonomics and patient comfort. The x-on nxt is characterized by its ergonomic rounded corners and a smart shape where the cable exits the sensor from the back. This allows the sensor to be well positioned for frontal, endodontic, molar and premolar images. Hygiene is provided by protective covers, and the sensor can be disinfected by spraying or wiping.

>> the **application instrument set** provides quick and precise positioning. The right angle application device for the x-on nxt is simple and color-coded for the various indications.

>> the **connectivity** provides portability and multi-user capability. The x-on nxt has a very small USB box. So the sensor can easily and directly be inserted and removed on the unit or in the x-ray room. It merely needs a USB port and a USB cable from the PC to the usage site. Simply multi-user capable.

>> the calibration of the **sensor technology** ensures the highest diagnostic quality. The x-on nxt has been optimized for the highest diagnostic quality. Due to the high sensitivity of the x-on nxt, the x-ray dose can be minimized.
x-on nxt has byzz
Display and archive with one click — with the byzz image editing software. Request a demo CD from your specialty retailer or directly from orangedental.

byzz Software integrates the sensor perfectly into your network. This creates a perfect connection to your accounting program; the x-ray images are stored in a patient-specific manner; and byzz offers you many tools for supporting diagnoses and patient consultation. In addition, with byzz you can integrate all the existing imaging systems in your practice onto one software platform.

>> The newest sensor technology guarantees the highest diagnostic quality.

>> Sharp. Sharper. x-on nxt.

>> See what you want to see.

>> 2-year standard guarantee with optional guarantee extension to 5 years
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