

# NOMEX Multimeter

## Technical Data

### Measuring ranges

Air kerma rate R/F	5 $\mu$ Gy/s ... 500 mGy/s, $\pm$ 3.5 % (typically $\pm$ 1.5 %)
Sensitivity Mode	0.1 $\mu$ Gy/s ... 500 mGy/s (typically $\pm$ 5 %)
Air kerma R/F	50 nGy ... 500 Gy, $\pm$ 3.5 % (typically $\pm$ 1.5 %)
kV R/F	(40 ... 150) kV, $\pm$ 1.5 % or $\pm$ 1 kV (typically $\pm$ 0.75 % or $\pm$ 0.5 kV)
Total filtration	(1.5 ... 40) mm Al, $\pm$ 10 % or $\pm$ 0.5 mm Al
HVL R/F	(0.95 ... 13.5) mm Al, $\pm$ 0.25 mm Al (typically $\pm$ 0.1 mm Al)
Air kerma rate MAM*	50 $\mu$ Gy/s ... 500 mGy/s $\pm$ 2.5 %
Air kerma MAM*	0.5 $\mu$ Gy ... 500 Gy, $\pm$ 2.5 %
kV MAM*	(23 ... 35) kV, $\pm$ 0.5 kV
HVL MAM*	(0.25 ... 0.75) mm Al, $\pm$ 0.01 mm Al
Dose per pulse	50 nGy ... 500 Gy, $\pm$ 3.5 % (typically $\pm$ 1.5 %)
Pulses	0 ... 99999
Frequency	0.2 Hz ... 500 Hz
Irradiation time	1 ms ... 298 h, $\pm$ 1 % or $\pm$ 0.5 ms

**PC Interface** USB V2.0 full speed

**Outer dimensions** 115 mm x 50 mm x 9 mm

**Weight** 250 g

\* Refers to all incl. qualities: Mo/30 $\mu$ mMo, Mo/0.5mmAl, Mo/25 $\mu$ mRh, W/0.7mmAl, W/50 $\mu$ mRh, W/50 $\mu$ mAg, Rh/25 $\mu$ mRh (each with and without compression paddle correction)

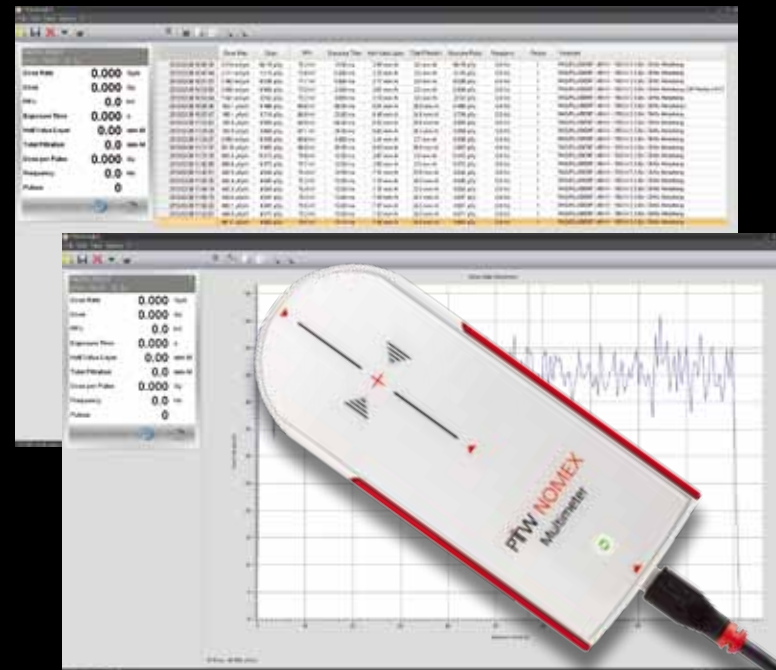
### Ordering Information

[L981815 ] NOMEX multimeter  
for measurements in R/F/DENT, CT, MAM. Includes NOMEX multimeter, software on CD, 2 m USB and 5 m long active extension cable, calibration certificate, user manual and a transport case. Requires connection to a PC.

### Options

[L991422]	Mobile PC
[T20016]	NOMEX multimeter holder
[T20017]	NOMEX cassette adapter

© D909.139.00/03 Effective 2012/04. Previous specifications are void.



# NOMEX Multimeter

True Precision. PTW.



True to Scale



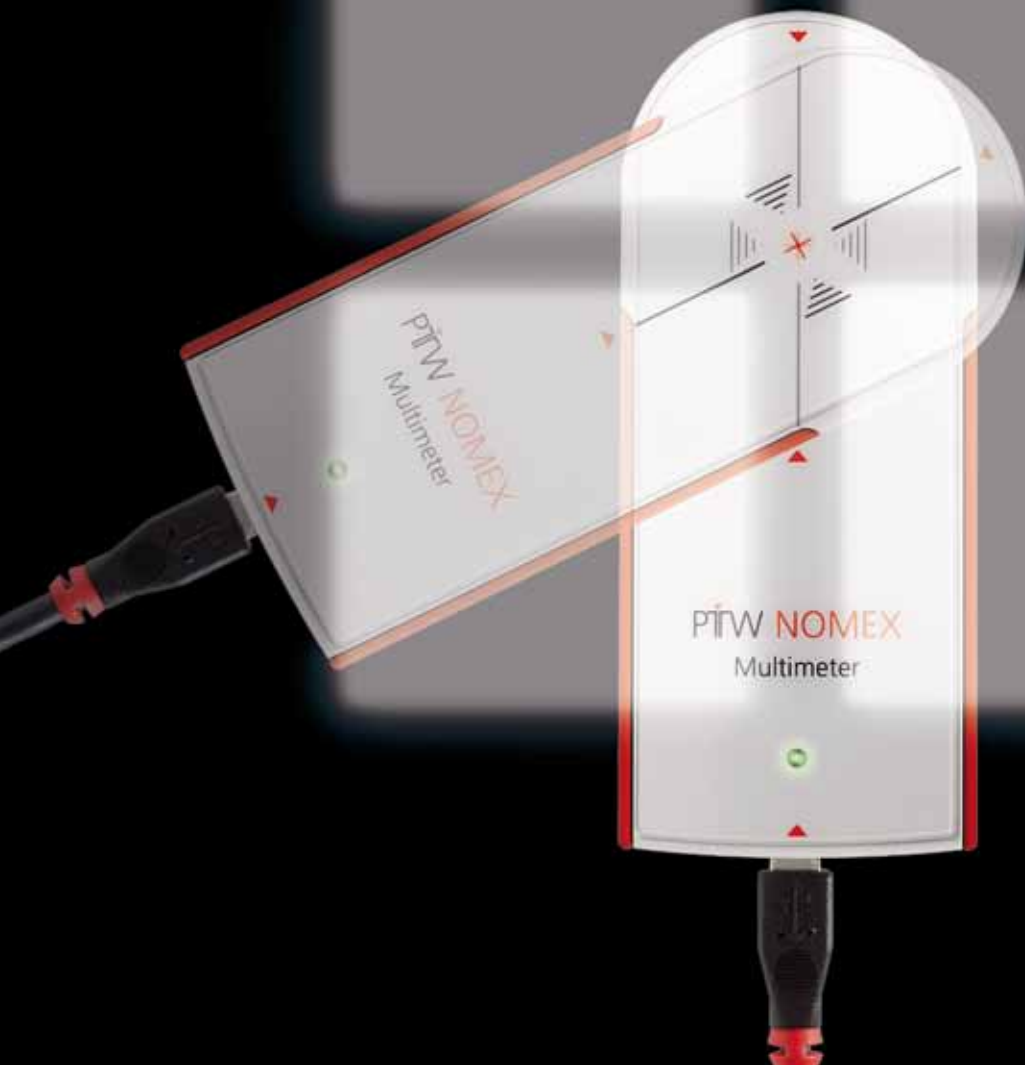
Connect ...



## NOMEX Multimeter

- ▶ Miniaturized multi-parameter measuring device compliant with IEC 61674 for acceptance testing and routine quality control measurements on diagnostic X-ray units (RAD/FLU, DENT, CT, MAM incl. Mo/Mo, Mo/Al, Mo/Rh, W/Al, W/Rh, W/Ag, Rh/Rh)
- ▶ Connection of the CE marked class IIb certified multimeter to a PC via USB
- ▶ Single exposure simultaneously captures: dose, dose rate, dose per pulse, pulses, frequency, irradiation time, tube voltage, total filtration, half value layer, together with waveforms for both kV and dose rate
- ▶ kVpmax, kVpmean and practical peak voltage (PPV) calculation according to the algorithm of IEC 61676
- ▶ True Precision: Dose accuracy within the RAD/FLU range typically  $\pm 1.5\%$ , within the MAM range  $\pm 2.5\%$  and kV accuracy within the RAD/FLU range typically  $\pm 0.75\%$  or  $\pm 0.5$  kV

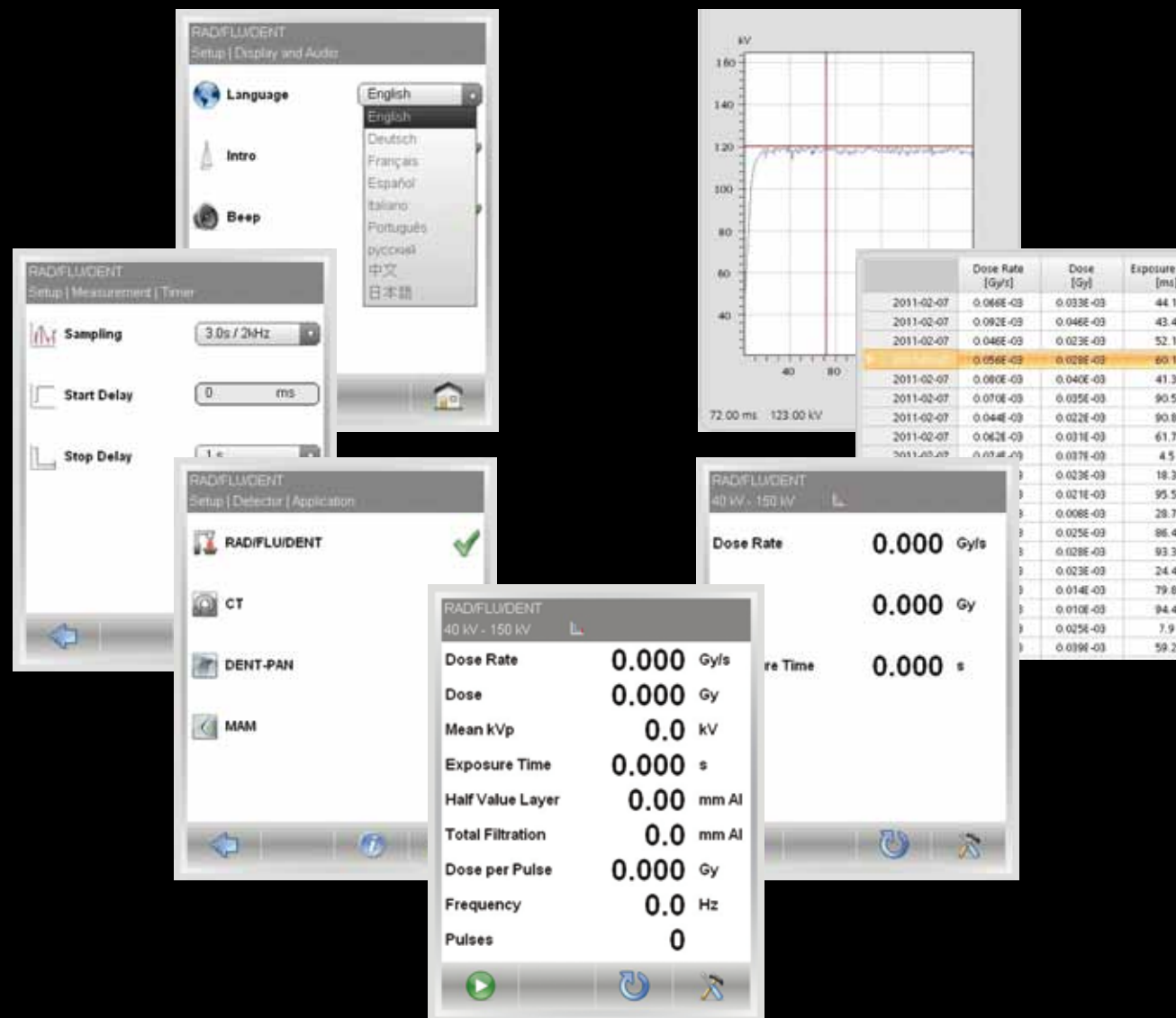
... position ...



# NOMEX Multimeter

- ▶ Angular independent for positioning within the beam
- ▶ Ergonomic housing avoids shifting after positioning
- ▶ Automatic start/stop and auto reset functions
- ▶ Automatic dose and kV ranging avoids double exposures
- ▶ Automatic total filtration compensation up to 40 mm Al
- ▶ Automatic HVL detection for all applications including mammography

... evaluate.



# NOMEX Multimeter

- ▶ Modifiable parameter displaying (view all parameters at a glance or just selected ones)
- ▶ Statistic calculations (mean value, standard deviation, coefficient of variation) by simply marking the results of interest
- ▶ Adjustable timer functions (start or stop delays) and waveform sampling up to 60 seconds
- ▶ Data and waveform export as XML or CSV file for subsequent data processing in Excel
- ▶ Software menu available in different languages (German, English, French, Spanish, Portuguese, Italian, Russian, Chinese, Japanese)