

## Technical Data

### P3119/P3120 4-Channel Case Depth Test Instrument

The 4-channel case depth test instrument is an upgraded version of the single-channel instrument. The instrument features a mobile cart-mounted industrial PC and single-channel analog transmitter with four receiving stages. The data acquisition software automatically switches up to four transducers (as assigned by software settings) for the applicable test locations with varying surface geometries. The Windows® 7 Professional based software can be customized to individual user requirements. The 20MHz ultrasonic transducer is contained in polystyrene wedge housing (removable), which is custom-fitted to the surface geometry as specified by the purchaser. The P3119 system is a rack-mounted mobile instrument; the P3120 system is designed as a stationary industrial case (desktop) instrument.

#### Analog Module

Four-channel E/A multiplexer, transmitter voltage generator, switching input filter, controllable pre-amplifier, analog rectifier;

Transmitter Voltage: ..... > 250 V<sub>ss</sub> at 50 ~  
 Frequency Range: ..... 20MHz, ±30% (-3dB)  
 Mode: ..... Pulse-Echo

#### Digital Module

Analog to digital conversion (A/DC) with subsequent averaging of the acquired data

Digitization Rate: ..... 80 MS/sec. (80MHz)  
 A/DC Resolution: ..... 8-bit  
 Signal Processing: ..... Subsequent averaging  
 Transit-time Resolution: ..... 12.5 nsec

#### Industrial Computer

Case ..... Mobile cart-mounted industrial PC, Pentium 4 3.4GHz processor, 4GB RAM, 150/750 GB HDD, LightScribe DVD-R/RW, 1Gbps LAN, standard, RS-232, LPT, PS/2, USB 2.0, etc.  
 Dimensions ..... 762mm (30.0") width, 762mm (30.0") height, 762mm (30.0") depth  
 Display ..... ELO 19" high-contrast TFT-LCD flat panel touch screen monitor, maximum resolution 1024x768, VESA, Super VGA, and VGA compatible, mounted on articulated arm  
 Dimensions ..... 438m (17.24") width; 316mm (12.44") height  
 Mobile Cart..... Sturdy all steel 2"x2" tube frame w/ 5" rubber casters; height adjustable from 30" – 37 ½", with 30"x 30" laminate table top  
 Weight..... approx. 118 kg (260 lb.)  
 Operating Temperature..... +5°C to +40°C (41° to 104° F) @ 10% to 75% humidity

#### Documentation

P3119/20 User Manual and operating instructions