

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 WindowsXP® 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_{ss} at 50 ~

Frequency Range: 20MHz, ±30% (-3dB)

Mode: Pulse-Echo

Digital Module

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

Digitization Rate: 80 MS/sec. (80MHz)

A/D Resolution: 8-bit

Signal Processing: Subsequent averaging

Transit-time Resolution: 12.5 nsec

Industrial Computer

Case Mobile cart-mounted industrial PC, Pentium 4 2.8GHz processor, 2GB RAM, 80/160 GB HDD, 3½" FDD, DVD-R/RW, 100Mbps 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 IntelliTouch 17" 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