



UNIQUE
IN NDT

PILOT

High Performance in the Palm of Your Hand
Top performance in the market
Open Platform



PULSER

Pulser Voltage	25 to 400 V with 1 V step
Pulse Width	30 to 1000 ns
Pulse Width Resolution	4 ns
Short-Circuit Protection	Yes
Maximum PRF	20 kHz (higher option)

RECEIVER

Receiver #	8 parallel channels
Receiver Resolution	14 bits
Receiver Gain Range	110 dB
Receiver Bandwidth	0.3 to 20 MHz (50 kHz in option)
Receiver Input	1 Vp-p

SIGNAL PROCESSING

FIR Filter	Up to 32 taps
Different Filter per Cycle	Choose from 15 user defined filters
Ascan Resolution	8, 14 bits
Ascan Sampling	100 MHz
Decimation	50, 33, 25, 20, 16.67, 14.28, 12.50, ... MHz
Ascan Compression	Yes
Acquire All Ascans	Yes
Ascan Length	Up to 32 k points
Gates	4 (Amplitude, TOF)
Gate Modes	Any (Peak, Flank, Zero before crossing, Zero after crossing)
IF Gate and Ascan	Yes, no limitations

COMMUNICATION

Communication Link	LAN 1 Gb (TCP/IP)
Usefull UT Data Flow ⁽¹⁾	100 MB/s

SYSTEM

Configurations	8 parallel channels per unit
Channel Mode	Full Parallel and Multiplexed
UT Modes	Pulse/Echo, Pitch & Catch, Through Transmission (TT)
Dimensions	200 x 140 x 45 mm 9.45 x 5.51 x 1.77 in.
Weights	< 1.5 Kg / 3.3 lb
Mechanical Integration	Bracket Plate in option
IP Rating	Designed for IP 67
Power Consumption ⁽²⁾	10 W
Temperature Monitoring	Yes
Open Source SDK	Yes (Fully Documented API)
Software Languages	C++, Python, C#, LabVIEW, MATLAB, etc...
Operating Systems	Windows, Linux
Multiplatform Compatibility	With all AOS products

I/O MANAGEMENT

Encoders	X, Y (differential, single ended)
Encoder Modes	Quadrature, Quadrature 4 edges, Direction Count, Forward, Backward
Synch In	Pulse Trig, Sequence Trig, Encoders
Synch Out	Pulse Trig, Sequence Trig, Output
Pin Assignments	Programmable
Number I/O	8

⁽¹⁾ The maximum data rate can vary according to the PC, the OS setting and the Software environment. Photos and specifications not contractual.

⁽²⁾ Measured at a 2 kHz PRF with a 5 MHz probe setting, all channels enabled.

