



Explorer Max

- ✔ 10 Gb Ethernet Connection
- ✔ Ultra Compact
- ✔ Super High-Speed with Elementary FMC/TFM:
for 1/2" Weld 60°
Inspection Speed over 100mm/s

PULSER

Pulsar Voltage	Up to 100 V (200 V in option)
Pulse Width	30 to 1000 ns
Pulse Width Resolution	4 ns
Pulse Focusing Delay	0 to 40 μ s
Pulse Delay Resolution	4 ns
Maximum PRF	20 kHz (higher optional)

RECEIVER

Receiver Resolution	14 bits per channel
Receiver Gain Range	110 dB
Receiver Bandwidth	0.3 to 20 MHz (50 kHz in option)
Receiver Focusing Delay	0 to 40 μ s
Delay Resolution	5 ns
DDF	Up to 64 points
Receiver TCG	45 dB
TCG Slope	\pm 20 dB/ μ s

SIGNAL PROCESSING

FIR Filter	Up to 64 taps
Different Filter per Cycle	Choose from 15 user defined filters
Ascan Resolution	8,16 bits
Ascan Sampling	100 MHz
Decimation	50, 33, 25, 20, 16.6, 14.28, 12.5 MHz...
Ascan Compression	Yes
Acquire All Ascans	Yes
Ascan Length	8 k points in FMC Mode
Max Number of Cycles	4,096 Cycles
FMC Option	Yes
Gates	4 (Amplitude, TOF)
Gate Modes	Any (Peak, Flank, Zero before crossing, Zero after crossing)
IF Gates and Ascan	Yes, no limitations Surface and backwall tracking

COMMUNICATION

Communication Link	LAN 10 Gb (TCP/IP)
Useful UT Data Flow ¹	1 GB/s per unit

SYSTEM

Configurations	64/64, 64/128
UT Modes	Pulse/Echo, Pitch & Catch, Through Transmission (TT)
Full-Matrix Capture	Yes, all FMC techniques available
Dimensions	265x142x40 mm 10.43x5.6x1.57 in.
Weights	1.5 kg / 3.3 lb
Mechanical Integration	Bracket Plate in option
IP Rating	Designed for IP 67
Temperature Monitoring	Yes
Open Source SDK	Yes (Fully documented API)
Software Languages	C++, Python, C#, LabVIEW, MATLAB, etc...
Operating Systems	Windows, Linux
AFM-API (High level API)	Including TFM, Real time acquisition & display (optional)
Multi Platform 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
Pin Assignments	Programmable
Number I/O	8