

Explorer

IP65/IP68 PAUT and Advanced TFM Solution

Fast Data Throughput

up to 200 MB/s

Up to 100 m between unit and the PC **High Bandwidth**

50 kHz to **20 MHz**

Pulser

| Pulse Voltage | 100 V to 150 V* |
|---------------------------------|--|
| Pulse Type | Negative Square |
| Pulse Width | 20~1000 ns (lower frequency in option) |
| Pulse Width Resolution | 4 ns |
| Pulse Focusing Delay | 0~40 μs |
| Pulse Focusing Delay Resolution | 4 ns |
| Maximum PRF | 20 kHz |

Receiver

| Receiver Sensitivity | 14 bits |
|---------------------------|--------------------|
| Receiver Gain Range | 12~110 dB |
| Receiver Bandwidth | 50 kHz to 20 MHz |
| Receiver Focusing Delay | 0~40 μs at 100 MHz |
| Focusing Delay Resolution | 5 ns |
| DDF | Up to 64 points |

Communication¹

| LAN (1000 BT, Gigabit Ethernet) | From 100 to 200 MB/s** |
|---------------------------------|------------------------|
|---------------------------------|------------------------|

¹The maximum data rate can vary according to the PC, the OS setting and the software environment. *Function of the number of channels





Acquisition

| FIR Filter | Up to 64 taps |
|-----------------------------|-------------------------------------|
| Different Filter per Cycle | Choose from 15 User Defined Filters |
| A-Scan Sampling | 100 MHz |
| Decimation | 50, 33, 25, 16.65, 14.28, 12.5 MHz |
| Acquire All A-Scans | Yes |
| A-scan length (beam former) | 16 k Points |
| Max Number of Cycles | 4096 Cycles |
| FMC option | Yes |
| A-Scan Length | 4096 points in FMC Mode |

System

| Dimensions and weight | Explorer: 200x130x43 mm, <1.7 Kg Explorer VR: 245x130x45 mm, <1.7 Kg Explorer 64/256: 240x130x75 mm, <2 Kg |
|--|--|
| Number of Channels (Configurations) | 16/16, 16/64, 16/128, 16/256, 32/32, 32/128, 32/256, 64/64, 64/128, 64/256, 128/128 |
| Max Number of Cycles | 4096 |
| Number of Sub-Cycles | 128 |
| A-Scan Resolution | 8, 16 bits |
| Temperature Sensors | Yes |
| Open Source SDK | Yes (Fully Documented API) |
| Software Languages | C++, C#, LabVIEW, MATLAB, Python and more |
| Operating Systems | Windows, Linux |
| Full-Matrix Capture | Yes (Standard), all FMC modes available |
| 3D Focal Law Calculator for Matrix PA | Yes (Optional Upgrade) |
| High Level API | Including TFM Toolbox, Real time acquisition & display |

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