Top of the Line Multi-Channel UT

Pilot *by TPAC*

Unique in NDT

- ☑ Full Parallel
- ☑ 162dB acquired at once (no more analog gain)
- ☑ 400V Pulser
- ☑ Bipolar, Burst & AWG Optional Add-Ons
- ☑ Designed for IP 67

PULSER

Pulser Type 1	8 Pulser up to 400V (Negative Square)
Pulser Type 2	8 Pulser Bipolar ± 100V (burst, AWG in option)
Pulse Width	20~2000ns
Pulse Width Resolution	4ns
Short-Circuit Protection	Yes
Maximum PRF	20kHz (higher in option)

RECEIVER

Receiver Dynamic	27 bits (no analog gain required)
Receiver Input	± 10V
Receiver Gain Range	162 dB
Receiver Bandwidth	10 kHz to 20MHz

SIGNAL PROCESSING

FIR Filter	Up to 64 taps
Different Filter per Cycle	Choose from 15 user defined filters
A-Scan Resolution	8, 16, 24, 32 bits, linear and log scale
A-Scan Sampling	100MHz
Decimation	50, 33, 25, 20, 16.65, 14.28, 12.5, ... MHz
Acquire All A-Scans	Yes
Ascan Length	Up to 32k points
Gates	4 (Amplitude, TOF)
Gates modes	Any (peak, Flank, Zero before crossing, Zero after crossing)
IF Gate and Ascan	No limitations

COMMUNICATION

LAN[1] (TCP protocol, Gigabit Ethernet)	Up to 100MB/s

SYSTEM

Configurations	8 channels
Available Configurations	Pulse/Echo, Pitch & Catch, Through Transmission (TT)
Channel Mode	Full Parallel or Multiplexed
Mechanical Integration	Bracket plate in option
Dimensions (LxWxH)	240x140x45 mm
Weight	< 1.5 Kg
Temperature / Humidity Sensors	Yes
Open Source SDK	Yes (Fully Documented API)
Software Languages	C++, C#, LabVIEW, MATLAB, and more
Power Consumption[2]	10 W
IP Rating	Designed for IP 67
Conectors	16 Lemo 00

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
TimeStamps	Yes (Position and Line Speed)
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.
2 Measured at a 2 kHz PRF with a 5 MHz setting, all channels enabled

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