Green is life
tmg

ABN 43 064 478 842

231 osborne avenue clayton south, vic 3169
PO box 1548, clayton south, vic 3169
t 03 9265 7400 **f** 03 9558 0875
freecall 1800 680 680
www.tmgtestequipment.com.au

Test & Measurement

- sales
- rentals
- calibration
- repair
- disposal

Complimentary Reference Material

This PDF has been made available as a complimentary service for you to assist in evaluating this model for your testing requirements.

TMG offers a wide range of test equipment solutions, from renting short to long term, buying refurbished and purchasing new. Financing options, such as Financial Rental, and Leasing are also available on application.

TMG will assist if you are unsure whether this model will suit your requirements.

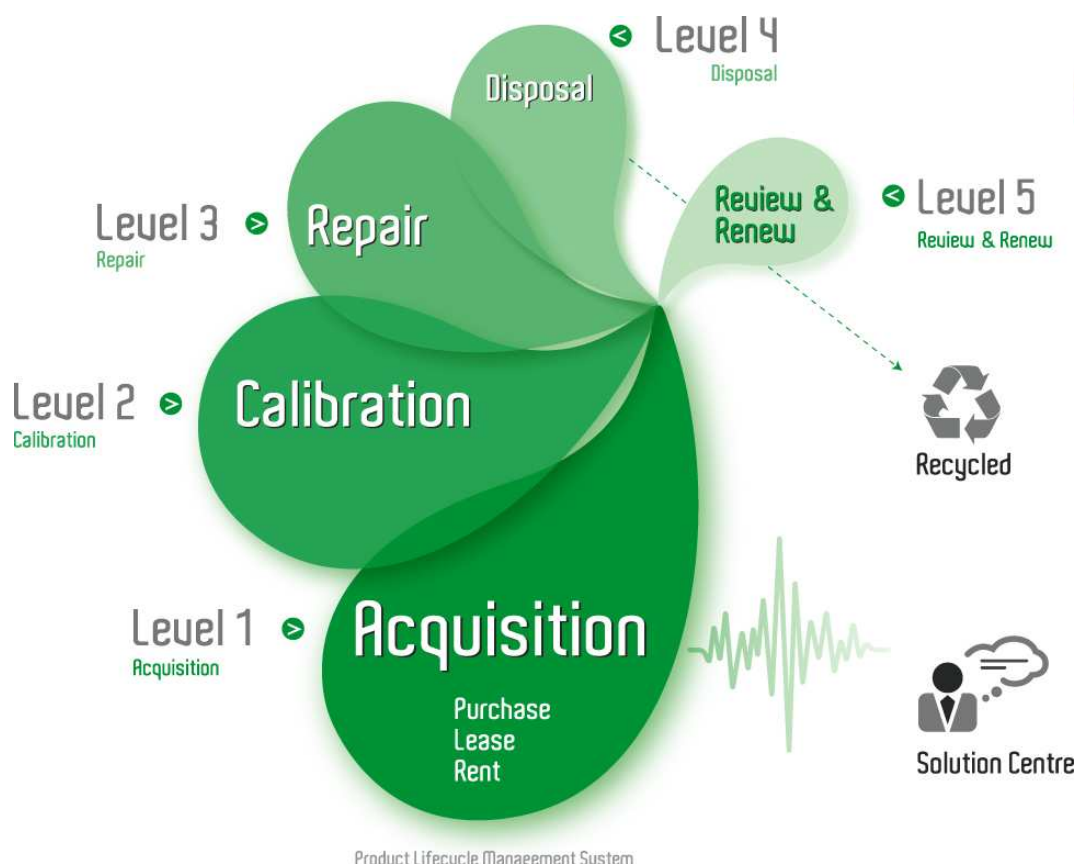Call TMG if you need to organise repair and/or calibrate your unit.

If you click on the "Click-to-Call" logo below, you can all us for FREE!

TMG Corporate Website   **TMG Products Website**

Click-to-Call
TMG Now

Level 4
Disposal

Disposal

Level 3 — Repair
Repair

Review & Renew

Level 5
Review & Renew

Level 2 — Calibration
Calibration

Recycled

Level 1 — Acquisition
Acquisition
Purchase
Lease
Rent

Solution Centre

Product Lifecycle Management System

Disclaimer:
All trademarks appearing within this PDF are trademarks of their respective owners.

Form 080/01

NATA   CERTIFIED MANAGEMENT SYSTEM   AIDN

LeCroy

WavePro® 7 Zi Series
1.5 GHz – 6 GHz

The New Oscilloscope Experience

SPECIFICATIONS

Vertical System	WavePro 715Zi	WavePro 725Zi (SDA)	WavePro 735Zi (SDA, DDA)	WavePro 740Zi (SDA)	WavePro 760Zi (SDA, DDA)
Analog (ProLink Input) Bandwidth @ 50 Ω (-3 dB) (≥ 10 mV/div)	Not Applicable	Not Applicable	Not Applicable	4 GHz (≥ 10 mV/div)	6 GHz (≥ 10 mV/div)
Analog (ProBus Input) Bandwidth @ 50 Ω (-3 dB)	1.5 GHz (≥ 10 mV/div)	2.5 GHz (≥ 10 mV/div)	3.5 GHz (≥ 10 mV/div)	3.5 GHz (≥ 10 mV/div)	3.5 GHz (≥ 10 mV/div)
Analog (ProBus Input) Bandwidth @ 1 MΩ (-3 dB)	500 MHz (Typical)	500 MHz (Typical)	500 MHz (Typical)	500 MHz (Typical)	500 MHz (Typical)
Rise Time (Typical, 50 Ω)	235 ps	150 ps	120 ps	105 ps	70 ps
Input Channels	4				
Bandwidth Limiters	20 MHz, 200 MHz, 1 GHz		20 MHz, 200 MHz 1 GHz, 3 GHz	20 MHz, 200 MHz 1 GHz, 3 GHz	20 MHz, 200 MHz 1 GHz, 3 GHz, 4 GHz
Input Impedance	50 Ω ±2% or 1 MΩ ‖ 16 pF, 10 MΩ ‖ 11 pF with supplied probe				
Input Coupling	1 MΩ: AC, DC, GND; 50 Ω: DC, GND				
Maximum Input Voltage	50 Ω: ±5 V$_{rms}$ 1 MΩ: 250 V max. (peak AC: ≤ 10 kHz + DC)			50 Ω (ProBus): ±5 V$_{rms}$ 50 Ω (ProLink): ±4 V$_{peak}$ 1 MΩ (ProBus): 250 V max. (peak AC: ≤ 10 kHz + DC)	
Channel-Channel Isolation	≥ 100:1 at 2 GHz; ≥ 40:1 at 3 GHz; ≥ 20:1 at 4 GHz				
Vertical Resolution	8 bits; up to 11 bits with enhanced resolution (ERES)				
Sensitivity	50 Ω: 2 mV–1 V/div, fully variable (2–9.99 mV/div via zoom); 1 MΩ: 2 mV–10 V/div, fully variable				
DC Gain Accuracy	±1.5% of full scale				
Offset Range	**50 Ω (ProBus Input):** ±750 mV @ 10–170 mV/div ±4 V @ 172 mV/div–1 V/div **1 MΩ: (ProBus Input):** ±1 V @ 2–128 mV/div ±10 V @ 130 mV–1.28 V/div ±100 V @ 1.3 V–10 V/div			**50 Ω (ProLink Input):** ±750 mV @ 10–118 mV/div ±4 V @ 120 mV/div–1 V/div **50 Ω (ProBus Input):** ±750 mV @ 10–170 mV/div ±4 V @ 172 mV/div–1 V/div **1 MΩ: (ProBus Input):** ±1 V @ 2–128 mV/div ±10 V @ 130 mV–1.28 V/div ±100 V @ 1.3 V–10 V/div	
Offset Accuracy	±(1.5% of full scale +1.0% of offset value +1 mV)				

Horizontal System

Timebases	Internal timebase common to 4 input channels; an external clock may be applied at the auxiliary input
Time/Division Range	Real time: 20 ps/div–1000 s/div (RIS mode: 20 ps/div–10 ns/div; Roll mode: up to 1000 s/div)
Clock Accuracy	≤ 1 ppm + (aging of 0.5 ppm/yr from last calibration)
Time Interval Accuracy	< 0.06 / SR + (clock accuracy* Reading) (rms)
Jitter Noise Floor	1.5 ps (Typical) · 1 ps (Typical) · 800 fs (Typical) · 750 fs (Typical) · 560 fs (Typical)
Trigger and Interpolator Jitter	3 ps$_{rms}$ (Typical) · 2 ps$_{rms}$ (Typical) · 1 ps$_{rms}$ (Typical)
Channel-Channel Deskew Range	±9 x time/div. setting, 100 ms max., each channel
External Timebase Reference (Input)	10 MHz; 50 Ω impedance, applied at the rear input
External Timebase Reference (Output)	10 MHz; 50 Ω impedance, applied at the rear output
External Clock	0.1 Hz–100 MHz, 50 Ω or 1 MΩ impedance, applied at the auxiliary input

Acquisition System	WP715Zi	WP725Zi (SDA)	WP735Zi (SDA, DDA)	WP740Zi (SDA)	WP760Zi (SDA, DDA)
Single-Shot Sample Rate/Ch	20 GS/s on 2 Ch 10 GS/s on 4 Ch (Option WPZi-1.5GHZ-4X20GS doubles the sample rate)		40 GS/s on 2 Ch 20 GS/s on 4 Ch		
Random Interleaved Sampling (RIS)	200 GS/s for repetitive signals (20 ps /div. to 10 ns/div)				
Maximum Trigger Rate	1,250,000 waveforms/second (in Sequence Mode, up to 4 channels)				
Intersegment Time	800 ns				
Maximum Acquisition Memory Points/Ch	(4 Ch / 2 Ch)			Number of Segments	
Standard Memory	10 M / 20 M (Standard memory for SDA and DDA scopes are 20M / 40 M)			5000	
S-32 – Memory Option	32 M / 64 M			15,000	
M-64 – Memory Option	64 M / 128 M			15,000	
L-128 – Memory Option	128 M / 256 M			15,000	

Acquisition Processing	WavePro 715Zi	WavePro 725Zi (SDA)	WavePro 735Zi (SDA, DDA)	WavePro 740Zi (SDA)	WavePro 760Zi (SDA, DDA)
Averaging	Summed averaging to 1 million sweeps; continuous averaging to 1 million sweeps				
Enhanced Resolution (ERES)	From 8.5 to 11 bits vertical resolution				
Envelope (Extrema)	Envelope, floor, or roof for up to 1 million sweeps				
Interpolation	Linear or Sin x/x				

Triggering System

Modes	Normal, Auto, Single, and Stop				
Sources	Any input channel, Aux, Aux/10, or line; slope and level unique to each source (except line trigger)				
Coupling Mode	DC, AC, HFRej, LFRej				
Pre-trigger Delay	0–100% of memory size (adjustable in 1% increments of 100 ns)				
Post-trigger Delay	0–10,000 divisions in real time mode, limited at slower time/div settings or in roll mode				
Hold-off by Time or Events	From 2 ns up to 20 s or from 1 to 99,999,999 events				
Internal Trigger Range	±4.1 div from center				
Trigger Sensitivity with Edge Trigger (Ch 1–4) ProBus Inputs	2 div @ < 1 GHz 1.5 div @ < 500 MHz 1.0 div @ < 200 MHz (for DC, AC, LFRej coupling, ≥ 10 mV/div, 50 Ω)	2 div @ < 2.5 GHz 1.5 div @ < 1.25 GHz 1.0 div @ < 200 MHz (for DC, AC, LFRej coupling, ≥ 10 mV/div, 50 Ω)	2 div @ < 3.5 GHz 1.5 div @ < 1.75 GHz 1.0 div @ < 200 MHz (for DC, AC, LFRej coupling, ≥ 10 mV/div, 50 Ω)		
Trigger Sensitivity with Edge Trigger (Ch 1–4) ProLink Inputs	Not Applicable			2 div @ < 4 GHz 1.5 div @ < 2 GHz 1.0 div @ < 200 MHz (for DC, AC, LFRej coupling, ≥ 10 mV/div, 50 Ω)	2 div @ < 6 GHz 1.5 div @ < 3 GHz 1.0 div @ < 200 MHz (for DC, AC, LFRej coupling, ≥ 10 mV/div, 50 Ω)
External Trigger Sensitivity, (Edge Trigger)	2 div @ < 1 GHz 1.5 div @ < 500 MHz 1.0 div @ < 200 MHz (for DC, AC, LFRej coupling)				
Max. Trigger Frequency, SMART Trigger™	1.0 GHz @ ≥ 10 mV/div (minimum triggerable width 500 ps)	2.0 GHz @ ≥ 10 mV/div (minimum triggerable width 300 ps)	2.0 GHz @ ≥ 10 mV/div (minimum triggerable width 250 ps)	2.0 GHz @ ≥ 10 mV/div (minimum triggerable width 200 ps)	
External Trigger Input Range	Aux (±0.4 V); Aux/10 (±4 V)				

Basic Triggers

Edge	Triggers when signal meets slope (positive, negative, or either) and level condition.
TV-Composite Video	Triggers NTSC or PAL with selectable line and field; HDTV (720p, 1080i, 1080p) with selectable frame rate (50 or 60 Hz) and Line; or CUSTOM with selectable Fields (1–8), Lines (up to 2000), Frame Rates (25, 30, 50, or 60 Hz), Interlacing (1:1, 2:1, 4:1, 8:1), or Synch Pulse Slope (Positive or Negative).
Window	Trigger when signal or exits a window defined by adjustable thresholds.

SMART Triggers

State or Edge Qualified	Triggers on any input source only if a defined state or edge occurred on another input source. Delay between sources is selectable by time or events.
Qualified First	In Sequence acquisition mode, triggers repeatably on event B only if a defined pattern, state, or edge (event A) is satisfied in the first segment of the acquisition. Delay between sources is selectable by time or events.
Dropout	Triggers if signal drops out for longer than selected time between 1 ns and 20 s.
Pattern	Logic combination (AND, NAND, OR, NOR) of 5 inputs (4 channels and external trigger input). Each source can be high, low, or don't care. The High and Low level can be selected independently. Triggers at start or end of the pattern.

SMART Triggers with Exclusion Technology

Glitch	Triggers on positive or negative glitches with widths selectable as low as 200 ps (depending on oscilloscope bandwidth) to 20 s, or on intermittent faults.
Width (Signal or Pattern)	Triggers on positive, negative or both widths with widths selectable as low as 200 ps (depending on oscilloscope bandwidth) to 20 s, or on intermittent faults.
Interval (Signal or Pattern)	Triggers on intervals selectable between 1 ns and 20 s.
Timeout (State/Edge Qualified)	Triggers on any source if a given state (or transition edge) has occurred on another source. Delay between sources is 1 ns to 20 s, or 1 to 99,999,999 events.
Runt	Trigger on positive or negative runts defined by two voltage limits and two time limits. Select between 1 ns and 20 ns.
Slew Rate	Trigger on edge rates. Select limits for dV, dt, and slope. Select edge limits between 1 ns and 20 ns.
Exclusion Triggering	Trigger on intermittent faults by specifying the expected behavior and triggering when that condition is not met.

SPECIFICATIONS

High-speed Serial Protocol Triggering	WavePro 715Zi	WavePro 725Zi (SDA)	WavePro 735Zi (SDA, DDA)	WavePro 740Zi (SDA)	WavePro 760Zi (SDA, DDA)
Data Rates	Not available	(Option WPZi-MSPT, standard with SDA) 50 Mb/s–1.25 Gb/s		(Option WPZi-HSPT, standard with SDA) 50 Mb/s–2.7 Gb/s	
Pattern Length	–	80 bits, NRZ or 8b10b			
Clock and Data Outputs	–	400 mV$_{p-p}$ (Typical), AC coupled			
Clock Recovery Jitter	–	1 ps rms + 0.3% Unit Interval rms for PRBS data patterns with 50% transition density			
Hardware Clock Recovery Loop BW	–	PLL Loop BW = Fbaud/5500, 50 Mb/s to 1.25 Gb/s (Typical)			

Low-speed Serial Protocol Triggering (Optional)

Available	I²C, SPI (SPI, SSPI, SIOP), UART-RS232, CAN, LIN, FlexRay
Reference individual datasheets for complete specifications.

Color Waveform Display

Type	Color 15.3" flat panel TFT-Active Matrix LCD with high resolution touch screen
Resolution	WXGA; 1280 x 768 pixels
Number of Traces	Display a maximum of 8 traces. Simultaneously display channel, zoom, memory and math traces.
Grid Styles	Auto, Single, Dual, Quad, Octal, X-Y, Single+X-Y, Dual+X-Y
Waveform Representation	Sample dots joined, or sample dots only

Integrated Second Display

Type	Color 15.3" flat panel TFT-Active Matrix LCD with high resolution touch screen
Resolution	WXGA; 1280 x 768 pixels

LeCroy WaveStream Fast Viewing Mode

Intensity	256 Intensity Levels, 1–100% adjustable via front panel control
Number of Channels	Up to 4 simultaneously
Type	Select analog or color graded
Max. Sampling Rate	40 GS/s (20 GS/s for WavePro 715Zi without WPZi-1.5GHZ-4X20GS option)
Persistence Aging	Select from 500 ms to Infinite
Waveforms/Second (continuous)	Up to 2500 Waveforms/second

Analog Persistence Display

Analog and Color-Graded Persistence	Variable saturation levels; stores each trace's persistence data in memory
Persistence Types	Select analog, color, or three-dimensional
Trace Selection	Activate persistence on all or any combination of traces
Persistence Aging	Select from 500 ms to infinity
Sweep Display Modes	All accumulated, or all accumulated with last trace highlighted

High-speed Digitizer Output (Option)

Type	LeCroy LSIB
Transfer Rate	Up to 250 Mpts/s (Maximum)
Output Protocol	PCI Express, Gen1 (4 lanes utilized for data transfer)
Control Protocol	TCP/IP
Command Set	Via Windows Automation, or via LeCroy Remote Command Set

Zoom Expansion Traces

	Display up to 4 Zoom and 8 Math/Zoom traces

Processor/CPU

Type	Intel® Core™ 2 Quad, 2.5 GHz (or better)
Processor Memory	2 GB standard, up to 8 GB optional
(4 GB standard with "S-32" memory, 8 GB standard with "M-64" or "L-128" memory)
Operating System	Microsoft Windows® Vista® Business Edition (64-bit) with SP1
Real Time Clock	Date and time displayed with waveform and in hardcopy files.
SNTP support to synchronize to precision internal clocks.

Internal Waveform Memory

	4 active waveform memory traces (M1–M4) store 16-bit/point full length waveforms.
Waveforms can be stored to any number of files limited only by the data storage media capacity.

Setup Storage

Front Panel and Instrument Status	Store to the internal hard drive or to a USB-connected peripheral device.

SPECIFICATIONS

Interface	WavePro 715Zi	WavePro 725Zi (SDA)	WavePro 735Zi (SDA, DDA)	WavePro 740Zi (SDA)	WavePro 760Zi (SDA, DDA)
Remote Control	Via Windows Automation, or via LeCroy Remote Command Set				
Network Communication Standard	LXI Class C, VXI-11 and VICP				
GPIB Port (Optional)	Supports IEEE – 488.2				
LSIB Port (Optional)	Supports PCI Express Gen1 x4 protocol with LeCroy supplied API				
Ethernet Port	Supports 10/100/1000BaseT Ethernet interface (RJ45 port)				
USB Ports	Minimum 6 total (Including 3 front panel) USB 2.0 ports support Windows compatible devices				
External Monitor Port	15-pin D-Type WXGA compatible to support customer-supplied external monitor. DVI and power connector to support LeCroy WPZi-EXTDISP-15 additional touch screen display accessory. Includes support for extended desktop operation with optional LeCroy or other second monitor.				
Peripheral Bus	LeCroy LBUS standard				

Auxiliary Input

Signal Types	Select External Trigger or External Clock Input on the front panel
Coupling	50 Ω: DC; 1 MΩ: AC, DC, GND
Max. Input Voltage	50 Ω: 5 V_{rms}; 1 MΩ: 250 V (Peak AC < 10 kHz + DC)

Auxiliary Output

Signal Types	Select from calibrator, control signals or Off
Calibrator Signal	500 Hz–5 MHz square wave or DC level; 0.0 to 500 mV into 50 Ω (0–1 V into 1 MΩ)
Control Signals	Trigger enabled, trigger out, pass/fail status

Automatic Setup

Auto Setup	Automatically sets timebase, trigger, and sensitivity to display a wide range of repetitive signals
Find Vertical Scale	Automatically sets the vertical sensitivity and offset for the selected channel to display a waveform with the maximum dynamic range

General

Auto Calibration	Ensures specified DC and timing accuracy is maintained for 1 year minimum.

Probes

Probes	Qty. (4) ÷10 Passive Probes
Probe System	ProBus (and ProLink on 4 and 6 GHz models). Automatically detects and supports a variety of compatible probes
Scale Factors	Automatically or manually selected depending on probe used
Calibration Output	1 kHz square wave, 1 $V_{p\text{-}p}$ (typical), output to probe hook

Power Requirements

Voltage	100–240 VAC ±10% at 50/60 Hz; 100–120 VAC ±10% at 400 Hz; Automatic AC Voltage Selection
Max. Power Consumption	800 W/ 800 VA

Environmental

Temperature (Operating)	+5 °C to +40 °C including CD-RW/DVD-ROM drive
Temperature (Non-Operating)	–20 °C to +60 °C
Humidity (Operating)	5% to 80% relative humidity (non-condensing) up to +31 °C. Upper limit derates to 50% relative humidity (Non-condensing) at +40 °C.
Humidity (Non-Operating)	5% to 95% relative humidity (non-condensing) as tested per MIL-PRF-28800F
Altitude (Operating)	Up to 10,000 ft. (3048 m) at or below +25 °C
Altitude (Non-Operating)	Up to 40,000 ft. (12,192 m)
Random Vibration (Operating)	0.5 g_{rms} 5 Hz to 500 Hz, 15 minutes in each of three orthogonal axes
Random Vibration (Non-Operating)	2.4 g_{rms} 5 Hz to 500 Hz, 15 minutes in each of three orthogonal axes as tested per MIL-PRF-28800F
Functional Shock	20 g peak, half sine, 11 ms pulse, 3 shocks (positive and negative) in each of three orthogonal axes, 18 shocks total as tested per MIL-PRF-28800F

Physical Dimensions

Dimensions (HWD)	355 mm x 467 mm x 289 mm; 14" x 18.4" x 11.4" (height excludes feet)
Weight	18.4 kg; 40 lbs.
Shipping Weight	26.6 kg; 58 lbs.

Certifications

	CE Compliant, UL and cUL listed; conforms to EN 61326, EN 61010-1, UL 61010 2nd edition, and CSA C22.2 No. 61010-1-04

Warranty and Service

	3-year warranty; calibration recommended annually. Optional service programs include extended warranty, upgrades, and calibration services.

SPECIFICATIONS

Standard

Math Tools

Display up to 8 math function traces (F1–F8). The easy-to-use graphical interface simplifies setup of up to two operations on each function trace, and function traces can be chained together to perform math-on-math.

absolute value	invert (negate)
average (summed)	log (base e)
average (continuous)	log (base 10)
derivative	product (x)
deskew (resample)	ratio (/)
difference (–)	reciprocal
enhanced resolution (to 11 bits vertical)	rescale (with units)
envelope	roof
exp (base e)	(sinx)/x
exp (base 10)	square
fft (power spectrum, magnitude, phase, up to 128 Mpts)	square root
floor	sum (+)
integral	zoom (identity)

- Parameter math – add, subtract, multiply, or divide two different parameters
- Narrow-band power measurements
- Auto-correlation function
- Sparse function
- Cubic and Quadratic Interpolation function

Measure Tools

Display any 12 parameters together with statistics, including their average, high, low, and standard deviations. Histicons provide a fast, dynamic view of parameters and wave shape characteristics.

amplitude	level @ x	rms
area	maximum	std. deviation
base	mean	top
cycles	median	width
data	minimum	median
delay	narrow band phase	phase
Δ delay	narrow band power	time @ minimum (min.)
duty cycle	number of points	time @ maximum (max.)
duration	+overshoot	Δ time @ level
falltime (90–10%, 80–20%, @ level)	–overshoot	Δ time @ level from trigger
frequency	peak-to-peak	x@ max.
first	period	x@ min.
last	risetime (10–90%, 20–80%, @ level)	

Pass/Fail Testing

Simultaneously test multiple parameters against selectable parameter limits or pre-defined masks. Pass or fail conditions can initiate actions including document to local or networked files, e-mail the image of the failure, save waveforms, send a pulse out at the front panel auxiliary BNC output, or (with the GPIB option) send a GPIB SRQ.

Standard

Jitter and Timing

Parametric Measurements:
- period@level • width@level • duty@level • frequency@level
- TIE@level • edge@level

Statistical Analysis:
Jitter Trend (1000 pts) • Histograms (1000 pts)

Software Options

Jitter and Timing Analysis Software Package (WPZi-JTA2)

This package provides jitter timing and analysis using time, frequency, and statistical views for common timing parameters, and also includes other useful tools. JTA2 includes:

- Jitter and timing parameters, with "Track" graphs of

– Cycle-Cycle Jitter	– Period	– Hold
– N-Cycle	– Half Period	– Skew
– N-Cycle with start selection	– Width	– Duty Cycle
– Frequency	– Time Interval Error	– Duty Cycle Error
	– Setup	

- Edge@lv parameter (counts edges)
- Histograms expanded with 19 histogram parameters and up to 2 billion events
- Trend (datalog) of up to 1 million events
- Track graphs of all parameters
- Persistence histogram, persistence trace (mean, range, sigma)

Spectrum Analyzer Mode (WPZi-SPECTRUM)

This package provides a new capability to navigate waveforms in the frequency domain using spectrum analyzer type controls.

FFT capability added to include:
- power averaging • power density • real and imaginary components
- frequency domain parameters • FFT on up to 128 Mpts.

Disk Drive Measurements Package (WPZi-DDM2)

This package provides disk drive parameter measurements and related mathematical functions for performing disk drive WaveShape Analysis.

- Disk Drive Parameters are as follows:

amplitude assymetry	local time trough-peak
local base	local time under threshold
local baseline separation	narrow band phase
local maximum	narrow band power
local minimum	overwrite
local number	pulse width 50
local peak-peak	pulse width 50–
local time between events	pulse width 50+
local time between peaks	resolution
local time between troughs	track average amplitude
local time at minimum	track average amplitude–
local time at maximum	track average amplitude+
local time peak-trough	auto-correlation s/n
local time over threshold	non-linear transition shift

Product Description	Product Code

WavePro 7 Zi Series Oscilloscopes

1.5 GHz, 10 GS/s, 4 Ch, 10 Mpts/Ch (20 GS/s and 20 Mpts/Ch in interleaved mode) with 50 Ω and 1 MΩ Input	WavePro 715Zi
2.5 GHz, 20 GS/s, 4 Ch, 10 Mpts/Ch (40 GS/s and 20 Mpts/Ch in interleaved mode) with 50 Ω and 1 MΩ Input	WavePro 725Zi
3.5 GHz, 20 GS/s, 4 Ch, 10 Mpts/Ch (40 GS/s and 20 Mpts/Ch in interleaved mode) with 50 Ω and 1 MΩ Input	WavePro 735Zi
4 GHz, 20 GS/s, 4 Ch, 10 Mpts/Ch (40 GS/s and 20 Mpts/Ch in interleaved mode) with 50 Ω and 1 MΩ Input	WavePro 740Zi
6 GHz, 20 GS/s, 4 Ch, 10 Mpts/Ch (40 GS/s and 20 Mpts/Ch in interleaved mode) with 50 Ω and 1 MΩ Input	WavePro 760Zi

SDA Zi Series Serial Data Analyzers

2.5 GHz, 20 GS/s, 4 Ch, 20 Mpts/Ch (40 GS/s and 40 Mpts/Ch in interleaved mode) with 50 Ω and 1 MΩ Input	SDA 725Zi
3.5 GHz, 20 GS/s, 4 Ch, 20 Mpts/Ch (40 GS/s and 40 Mpts/Ch in interleaved mode) with 50 Ω and 1 MΩ Input	SDA 735Zi
4 GHz, 20 GS/s, 4 Ch, 20 Mpts/Ch (40 GS/s and 40 Mpts/Ch in interleaved mode) with 50 Ω and 1 MΩ Input	SDA 740Zi
6 GHz, 20 GS/s, 4 Ch, 20 Mpts/Ch (40 GS/s and 40 Mpts/Ch in interleaved mode) with 50 Ω and 1 MΩ Input	SDA 760Zi

DDA 7 Zi Series Oscilloscopes

3.5 GHz, 20 GS/s, 4 Ch, 20 Mpts/Ch (40 GS/s and 20 Mpts/Ch in interleaved mode) with 50 Ω and 1 MΩ Input	DDA 735Zi
6 GHz, 20 GS/s, 4 Ch, 20 Mpts/Ch (40 GS/s and 20 Mpts/Ch in interleaved mode) with 50 Ω and 1 MΩ Input	DDA 760Zi

Included with Standard Configuration

÷10, 500 MHz Passive Probe (Qty. 4)	
ProLink to SMA Adapter: 4 each	LPA-SMA-A
Optical 3-Button Wheel Mouse, USB 2.0	
Protective Front Cover	
Printed Quick Reference Guide	
Printed Getting Started Manual	
Product Manual Set on CD-ROM	
Norton Anti-virus Software (Trial Version)	
Microsoft Windows® Vista® License	
Commercial NIST Calibration with Performance Certificate	
Power Cable for the Destination Country	
3-year Warranty	

Memory and Sample Rate Options

32 Mpts/Ch (64 Mpts/Ch Interleaved) Memory Option for WavePro 7 Zi. Includes an additional 2 GB of RAM (4 GB total)	WPZi-S-32
32 Mpts/Ch (64 Mpts/Ch Interleaved) Memory Option for DDA 7 Zi. Includes an additional 2 GB of RAM (4 GB total)	DDAPZi-S-32
32 Mpts/Ch (64 Mpts/Ch Interleaved) Memory Option for SDA 7 Zi. Includes an additional 2 GB of RAM (4 GB total)	SDAZi-S-32

Product Description	Product Code

Memory and Sample Rate Options (cont'd)

64 Mpts/Ch (128 Mpts/Ch Interleaved) Memory Option for WavePro 7 Zi. Includes an additional 6 GB of RAM (8 GB total)	WPZi-M-64
64 Mpts/Ch (128 Mpts/Ch Interleaved) Memory Option for DDA 7 Zi. Includes an additional 6 GB of RAM (8 GB total)	DDAZi-M-64
64 Mpts/Ch (128 Mpts/Ch Interleaved) Memory Option for SDA7 Zi. Includes an additional 6 GB of RAM (8 GB total)	SDAZi-M-64
128 Mpts/Ch (256 Mpts/Ch Interleaved) Memory Option for WavePro 7 Zi. Includes an additional 6 GB of RAM (8 GB total)	WPZi-L-128
128 Mpts/Ch (256 Mpts/Ch Interleaved) Memory Option for DDA 7 Zi. Includes an additional 6 GB of RAM (8 GB total)	DDAZi-L-128
128 Mpts/Ch (256 Mpts/Ch Interleaved) Memory Option for SDA 7 Zi. Includes an additional 6 GB of RAM (8 GB total)	SDAPZi-L-128
20 GS/s (40 GS/s Interleaved) Sampling Rate Option for 1.5 GHz WavePro 715 Zi	WPZi-1.5GHZ-4X20GS

CPU, Computer and Other Hardware Options

Upgrade from 2 GB to 8 GB CPU RAM	WPZi-2-UPG-8GBRAM
Upgrade from 4 GB to 8 GB CPU RAM	WPZi-4-UPG-8GBRAM
Upgrade from Standard Size Hard Drive to 200 GB Hard Drive	WPZi-200GB-HD
Additional 80 GB Hard Drive	WPZi-80GB-RHD-02
Additional 200 GB Hard Drive	WPZi-200GB-RHD-02
GPIB Option for LeCroy Oscilloscope	GPIB-2

Serial Data Options and Accessories

2.7 Gb/s High-speed Serial Pattern Trigger Option for 4–6 GHz Oscilloscopes (Standard on SDA 7 Zi and DDA 7 Zi)	WPZi-HSPT
1.25 Gb/s Medium-speed Serial Pattern Trigger Option for 2.5–3.5 GHz Oscilloscopes (Standard on SDA 7 Zi and DDA 7 Zi)	WPZi-MSPT
Cable De-Embed (Standard on SDA7 Zi and DDA 7 Zi)	WPZi–CBL-DE-EMBED
8b10b Decode only Option (Standard on SDA 7 Zi and DDA 7 Zi)	WPZi-8B10B D
I²C Bus Trigger and Decode Option	WPZi-I2Cbus TD
SPI Bus Trigger and Decode Option	WPZi-SPIbus TD
LIN Trigger and Decode Option	WPZi-LINbus TD
UART and RS-232 Trigger and Decode Option	WPZi-UART-RS232bus TD
FlexRay Trigger and Decode Option	WPZi-FlexRayBus TD
FlexRay Bus Trigger, Decode, and Physical Layer Test Option	WPZi-FlexRayBus TDP
CANbus TDM Trigger, Decode and Measure/Graph Option	WPZi-CANbus TDM
CANbus TD Trigger and Decode Option	WPZi-CANbus TD
Ethernet Application Software	QPHY-ENET*
USB Application Software	QPHY-USB†
PCIe Gen1 Compliance and Development Software Package	QPHY-PCIe
QualiPHY Enabled SATA Software Option	QPHY-SATA
WiMedia UWB Transmitter Measurement Software Option	QPHY-UWB
Eye Doctor (Virtual Probe and Equalizer emulation) Bundle	WPZi-EYEDR
Eye Doctor Virtual Probing Element	WPZi-EYEDR-VP
Eye Doctor Equalized Receiver Emulation	WPZi-EYEDR-EQ

*TF-ENET-B required.   †TF-USB-B required.

ORDERING INFORMATION

Product Description	Product Code
High-speed Digitizer Output	
High-speed PCIe Gen1 x4 Digitizer Output	LSIB-1
PCI Express X4 Host Interface Board for Desktop PC	LSIB-HOSTBOARD
PCI Express X4 Express Card Host Interface for Laptop Express Card Slot	LSIB-HOSTCARD
PCI Express X4 3-meter Cable with X4 Cable Connectors Included	LSIB-CABLE-3M
PCI Express X4 7-meter Cable with X4 Cable Connectors Included	LSIB-CABLE-7M
Mixed Signal Testing Options	
500 MHz, 2 GS/s, 18 Ch, 50 Mpts/Ch Mixed Signal Oscilloscope Option	MS-500
250 MHz, 1 GS/s, 36 Ch, 25 Mpts/Ch (500 MHz, 18 Ch, 2 GS/s, 50 Mpts/Ch Interleaved) Mixed Signal Oscilloscope Option	MS-500-36
250 MHz, 1 GS/s, 18 Ch, 10 Mpts/Ch Mixed Signal Oscilloscope Option	MS-250
General Purpose and Application Specific Software Options	
Advanced Customization Software Package	WPZi-XDEV
Spectrum Analyzer and Advanced FFT Option	WPZi-SPECTRUM
EMC Pulse Parameter Software Package	WPZi-EMC
Serial Data Mask Software Package (Standard on SDA 7 Zi and DDA 7 Zi)	WPZi-SDM
Advanced Optical Recording Measurement Package	WPZi-AORM
Demodulation Software Package	WPZi-DMOD
Jitter Timing and Analysis Software Package (Standard on SDA7 Zi and DDA 7 Zi)	WPZi-JTA2
Digital Filter Software Package	WPZi-DFP2
Disk Drive Measurements Software Package (Standard on DDA 7 Zi)	WPZi-DDM2
Electrical Telecom Mask Test Software Package	WPZi-ET-PMT
General Accessories	
Top-mounted, Fully Integrated 15.3" WXGA with Touch Screen Display, Including all Cabling and Software	WPZi-EXTDISP-15
Keyboard, USB	KYBD-1
Probe Deskew and Calibration Test Fixture	TF-DSQ
Hard Carrying Case	WPZi-HARDCASE
Soft Carrying Case	WPZi-SOFTCASE
Rackmount Accessory for Converting a Zi Series Oscilloscope to an 8U Rack-mounted Package	RACKMOUNT-1
ProLink to SMA Adapter	LPA-SMA-A
Kit of ProLink to SMA Adapters	LPA-SMA-KIT-A
Oscilloscope Cart with Additional Shelf and Drawer	OC1024
Oscilloscope Cart	OC1021

Product Description	Product Code
Probes and Probe Accessories	
2.5 GHz, 0.7 pF Active Probe (÷10), Small Form Factor	HFP2500
1.5 GHz, 0.9 pF, 1 MΩ High Impedance Active Probe	ZS1500
Set of 4 ZS1500, 1.5 GHz, 0.9 pF, 1 MΩ High Impedance Active Probe	ZS1500-QUADPAK
WaveLink 7.5 GHz, Differential Probe Adjustable Tip Module	D600A-AT*
WaveLink 3.5 GHz, 2.5 V_{p-p} Differential Probe Small Tip Module	D310*
WaveLink 3.5 GHz, 5 V_{p-p} Differential Probe Small Tip Module	D320*
WaveLink 6 GHz, 2.5 V_{p-p} Differential Probe Small Tip Module	D610*
WaveLink 6 GHz, 5 V_{p-p} Differential Probe Small Tip Module	D620*
WaveLink 6 GHz, Differential Positioner Mounted Tip Module	D500PT*
WaveLink ProLink Probe Body	WL-PLink
WaveLink ProBus Probe Body	WL-PBus
7.5 GHz Low Capacitance Passive Probe (÷10, 1 kΩ; ÷20, 500 Ω)	PP066
1 GHz, Active Differential Probe (÷1, ÷10, ÷20)	AP034
Optical-to-Electrical Converter, 500–870 nm ProLink BMA Connector	OE525
Optical-to-Electrical Converter, 950–1630 nm ProLink BMA Connector	OE555
10/100/1000Base-T Compliance Test Fixture	TF-ENET-B[†]
Telecom Adapter Kit 100 Ω Bal., 120 Ω Bal., 75 Ω Unbal.	TF-ET
SATA Gen1/Gen2 Compliance Test Fixture	TF-SATA
USB 2.0 Testing Compliance Test Fixture	TF-USB-B

* For a complete probe, order a W-PLink or WL-PBus Probe Body with the Probe Tip Module

[†] Includes ENET-2CAB-SMA018 and ENET-2ADA-BNCSMA

A variety of other active voltage and current probes are also available. Consult LeCroy for more information.

Customer Service

LeCroy oscilloscopes and probes are designed, built, and tested to ensure high reliability. In the unlikely event you experience difficulties, our digital oscilloscopes are fully warranted for three years and our probes are warranted for one year.

This warranty includes:

- No charge for return shipping
- Long-term 7-year support
- Upgrade to latest software at no charge

LeCroy

1-800-5-LeCroy
www.lecroy.com

Local sales offices are located throughout the world. To find the most convenient one visit www.lecroy.com