SPECIFICATION

Frequen	ncy Rang	e					
			DC,10mHz ~ 2MHz (10Arms), (30Arms)				
			DC,10mHz ~ 1MHz - (50Arms)				
Voltage	Input		200ml/nlc 2000//nlc(1000/wma) is 0 was as				
Internal	Range	300mVpk ~ 3000Vpk(1000Vrms) in 9 ranges (240Vrms within 300Vpk range, using 20% overange)					
	Accuracy		0.01% Rdg+0.038% Rng+(0.004%×kHz)+5mV				
Range			300μVpk ~ 3Vpk in 9 ranges [BNC connector 3Vpk max input]				
External Accuracy			0.01%Rdg+0.038%Rng+(0.004%×kHz)+3μV				
Current	Input						
		Ranges	3mApk ~ 30Apk(10Arms) in 9 ranges				
		Accuracy	0.01% Rdg+0.038% Rng+(0.004%×kHz)+ 30μA				
		Ranges	30mApk ~ 300Apk(30Arms) in 9 ranges				
Internal		Accuracy	0.01% Rdg+0.038% Rng+(0.004%×kHz)+ 300μA				
		Ranges	100mApk ~ 1000Apk(50Arms) in 9 ranges				
		Accuracy	0.01% Rdg+0.038% Rng+(0.004%×kHz)+ 900μA				
External input (External shunt Current sensor)		Ranges	300μVpk ~ 3Vpk in 9 ranges				
		Accuracy	0.01% Rdg+0.038% Rng+(0.004%×kHz)+ 3μV				
Phase A	ccuracy						
			0.005deg+(0.01deg×kHz)				
Power A	Accuracy						
		[0.03%+0.03%/pf+(0.01%×kHz)/pf] Rdg+0.03%VA Rng					
40-400Hz		[0.02%+0.03%/pf+(0.01%×kHz)/pf] Rdg+0.02%VA Rng					
General							
Crest Factor		20(Voltage and Current)					
Sample Rate IEC Modes		2.2Ms/s on all channels, No-Gap IEC61000 Harmonics and Flicker, IEC62301 Standby Power					
Application Modes		PWM Motor Drive, Ballast, Inrush, Power Transformer, Standby Power,					
			Fluctuating Harmonics, Flicker Meter, TVF105 Interharmonics				
CMRR -	Commor	n Mode Rejec	tion Ratio 250V @ 50Hz - ≥ 1mA (150dB)				
			250V @ 50Hz - ≥ 11HA (1500B) 100V @ 100kHz - ≥ 3mA (130dB)				
Measure	ement Pa	arameters	@				
			W ,VA ,Var ,pf ,V & A - rms ,rectified mean ,AC ,DC ,Peak ,Surge ,Crest Factor ,Form Factor ,Star to Delta Voltage, +ve Pk, -ve Pk				
		Frequency (Hz), Phase (deg), Fundamentals, Impedance					
		Harmonics, THD, TIF, THF, TRD, TDD					
Datalog	- Un to	Integrated Values, Datalog, Sum and Neutral values 4 user selectable measurement functions (30 with optional PC software)					
Datalog V		4 user sereet	No-Gap analysis, Minimum window 2ms				
Memory		10M records into flash RAM (Non-Volatile)					
Commu	nication	Ports					
RS232		Baud rate up to 38.4kbps,RTS/CTS flow control					
LAN		(Fitted as standard) ID/100 Base-T Ethernet auto sensing					
GPIB USB		(Fitted as standard) IEEE488.2 Compatible USB 2.0 and 1.1 compatible					
Analogue	Output	Bipolar ±10V(BNC)					
Speed Input		BNC Bipolar±10V 0.05% Rdg + 0.05% Rng or Pulse count 1Hz to 1MHz 0.01% Rdg					
Torque		BNC Bipolar±10V or Pulse count 1Hz to 1MHz 0.01% Rdg					
Sync		4 ~ 6 Phase measurement (Master/Slave)					
Extension			4 ~ 6 Phase (Master/Slave) + Auxilary				
Standar Leads	d Access	sories	Dawar DC222 LICE CDID				
	C-bl		Power, RS232, USB, GPIB 36A 1.5m long 4mm stackable terminals				
	on Cables		1x red, 1x yellow and 2x black per phase (1x red, 1x black with HC version)				
Connection CD-ROM	on Clips		4mm terminated aligator clips - 1x red, 1x yellow and 2x black per phase (1x red and 1x black per phase with HC version) Committee 2 (PS232/LISB/LAN) Command line Script based communication software				
Documents		CommView2 (RS232/USB/LAN), Command line, Script based communication software User manual, Communications manual, Calibration certificate, Quick start guide					
		ironmental	oco manan, communication manual, cambianon continuate, senior citari guide				
Display			320×240 dot full colour TFT, White LED Backlit				
Dimensio	ns		130H×400W×315D mm excluding feet				
Weight			5.4kg(1 Phase), 6kg(3 Phase)				
Safety Is			1000Vrms or DC(CATII), 600Vrms or DC(CATIII)				
Power supply Operating		90 ~ 265Vrms, 50 ~ 60Hz, 40VAmax 23°C ± 5°C Ambient Temperature (or air intake temperature when rack mounted), 20-90% Non-Condensing Relative Humidity.					
Condition			Temperature coefficient ±0.01% per °C of reading at 5-18°C and 28-40°C				

SPECIFICATION

Harmonic Specification Bandwidth DC,10mHz - 2MHz DC,10mHz - 1MHz No. of Harmonics 417 Sampling Frequency 2Ms/s Signal Processing DFT (Discreet Fourier Transform) Crest Factor 20 Power Factor 20 Power Factor 30 to 1 Harmonic Accuracy Voltage and Current Harmonic Accuracy Voltage and Current 0.01% Rdg+0.038% Rng+(0.004%*kHz)+5mV IEC61000 Harmonic Accuracy Voltage and Current 0.2% Rdg+0.038% Rng+(0.004%*kHz)+5mV Cycle by Cycle Analysis direct to PC - 2Ms/s sample rate (Window setting) Data Rate 5ms Cycle by Cycle Analysis direct to Internal RAM - 2Ms/s sample rate Data Rate 2ms Voltage Attenuator Overload Capability 20ms 4.2kVpk (3kVrms) 5 5 3.1kVpk (2.2kVrms) Minimum Current Measurement at Full Accuracy							
Bandwidth DC, 10mHz ~1MHz No. of Harmonics 417 Sampling Frequency 2Ms/s Signal Processing DFT (Discreet Fourier Transform) Crest Factor 20 Power Factor 4 0 to 1 Harmonic Accuracy Voltage and Current Harmonic Accuracy (above) still applies with any Frequency Filter set IEC61000 Harmonic Accuracy Voltage and Current 0.2% Rdg+0.038% Rng+(0.004%*kHz)+5mV Cycle by Cycle Analysis direct to PC - 2Ms/s sample rate (Window setting) Data Rate 5 5ms Cycle by Cycle Analysis direct to Internal RAM - 2Ms/s sample rate Data Rate 2 2ms Voltage Attenuator Overload Capability 20ms 4.2kVpk (3kVrms) 5 5 3.1kVpk (2.2kVrms) Continuous	Harmonic Specifica	ation					
DC,10mHz ~1MHz MTA		DC,10mHz ~ 2MHz					
Sampling Frequency 2Ms/s Signal Processing DFT (Discreet Fourier Transform) Crest Factor 20 Power Factor 0 to 1 Harmonic Accuracy Voltage and Current 0.01% Rdg+0.038% Rng+(0.004%×kHz)+5mV Harmonic Accuracy (above) still applies with any Frequency Filter set IEC61000 Harmonic Accuracy Voltage and Current 0.2% Rdg+0.038% Rng+(0.004%×kHz)+5mV Cycle by Cycle Analysis direct to PC - 2Ms/s sample rate (Window setting) Data Rate 5ms Cycle by Cycle Analysis direct to Internal RAM - 2Ms/s sample rate 2ms Voltage Attenuator Overload Capability 20ms 20ms 4.2kVpk (3kVrms) 5s 3.1kVpk (2.2kVrms) Continuous 3kVpk (1kVrms)	Bandwidth	DC,10mHz ~1MHz					
Signal Processing Crest Factor Crest Factor Power Factor O to 1 Harmonic Accuracy Voltage and Current Harmonic Accuracy Voltage and Current Feeding Accuracy Voltage and Current Cycle by Cycle Analysis direct to PC - 2Ms/s sample rate (Window setting) Data Rate D	No. of Harmonics	417					
Crest Factor 20	Sampling Frequency	2Ms/s					
Power Factor 0 to 1 Harmonic Accuracy Voltage and Current	Signal Processing	DFT (Discreet Fourier Transform)					
Harmonic Accuracy Voltage and Current Harmonic Accuracy (above) still applies with any Frequency Filter set IEC61000 Harmonic Accuracy Voltage and Current O.2% Rdg+0.038% Rng+(0.004%*kHz)+5mV Cycle by Cycle Analysis direct to PC - 2Ms/s sample rate (Window setting) Data Rate Accuracy (above) still applies with any Frequency Filter set IEC61000 Harmonic Accuracy O.2% Rdg+0.038% Rng+(0.004%*kHz)+5mV Cycle by Cycle Analysis direct to PC - 2Ms/s sample rate (Window setting) Data Rate Data Rate Data Rate Accuracy (above) still applies with any Frequency Filter set IEC61000 Harmonic Accuracy O.2% Rdg+0.038% Rng+(0.004%*kHz)+5mV Cycle by Cycle Analysis direct to PC - 2Ms/s sample rate (Window setting) Data Rate Data Rate Accuracy (above) still applies with any Frequency Filter set IEC61000 Harmonic Accuracy O.2% Rdg+0.038% Rng+(0.004%*kHz)+5mV Cycle by Cycle Analysis direct to PC - 2Ms/s sample rate (Window setting) Data Rate Sms Cycle by Cycle Analysis direct to Internal RAM - 2Ms/s sample rate Data Rate Accuracy (above) still applies with any Frequency Filter set IEC61000 Harmonic Accuracy O.2% Rdg+0.038% Rng+(0.004%*kHz)+5mV Cycle by Cycle Analysis direct to PC - 2Ms/s sample rate (Window setting) Data Rate Sms Voltage Attenuator Overload Capability Accuracy (above) still applies with any Frequency Filter set	Crest Factor	20					
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Current Current Curre	Harmonic Accurac						
Harmonic Accuracy (above) still applies with any Frequency Filter set IEC61000 Harmonic Accuracy	Voltage and	0.01% Rdo+0.038% Rno+(0.004%xkHz)+5mV					
IEC61000 Harmonic Accuracy Voltage and Current 0.2% Rdg+0.038% Rng+(0.004%*kHz)+5mV Cycle by Cycle Analysis direct to PC - 2Ms/s sample rate (Window setting) Data Rate 5ms Cycle by Cycle Analysis direct to Internal RAM - 2Ms/s sample rate Data Rate 2ms Voltage Attenuator Overload Capability 20ms 4.2kVpk (3kVrms) 5s 3.1kVpk (2.2kVrms) Continuous 3kVpk (1kVrms)	Current	5.07/6 (tag-5.000 /6 (tag-5.00					
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Current 0.2% Rdg+0.038% Rng+(0.004%×kHz)+5mV Cycle by Cycle Analysis direct to PC - 2Ms/s sample rate (Window setting) Data Rate 5ms Cycle by Cycle Analysis direct to Internal RAM - 2Ms/s sample rate Data Rate Data Rate Voltage Attenuator Overload Capability 20ms 4.2kVpk (3kVrms) 5s 3.1kVpk (2.2kVrms) Continuous	IEC61000 Harmoni	c Accuracy					
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Data Rate 5ms Cycle by Cycle Analysis direct to Internal RAM - 2Ms/s sample rate Data Rate 2ms Voltage Attenuator Overload Capability 20ms 4.2kVpk (3kVrms) 5s 3.1kVpk (2.2kVrms) Continuous 3kVpk (1kVrms)							
Cycle by Cycle Analysis direct to Internal RAM - 2Ms/s sample rate Data Rate 2ms Voltage Attenuator Overload Capability 4.2kVpk (3kVrms) 5s 3.1kVpk (2.2kVrms) Continuous 3kVpk (1kVrms)	Cycle by Cycle Analysis direct to PC - 2Ms/s sample rate (Window setting)						
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Voltage Attenuator Overload Capability 20ms 4.2kVpk (3kVrms) 5s 3.1kVpk (2.2kVrms) Continuous 3kVpk (1kVrms)	Cycle by Cycle Analysis direct to Internal RAM - 2Ms/s sample rate						
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5s 3.1kVpk (2.2kVrms) Continuous 3kVpk (1kVrms)	Voltage Attenuator Overload Capability						
Continuous 3kVpk (1kVrms)	20ms	4.2kVpk (3kVrms)					
	5s	3.1kVpk (2.2kVrms)					
Minimum Convent Measurement of Full Assurance	Continuous	3kVpk (1kVrms)					
Minimum Current Measurement at ruli Accuracy							
700uArms		700uArms					

ACCESSORIES

Leads and Interfacing					
Туре	Specification				
36A Connection lead set	1.5 Meter - 36A lead set with 4mm stackable safety terminals 1x Red, 1x Yellow and 2x Black per phase plus alligator clips				
36A 4mm to spade (Option)	1.5 Meter - 36A lead set with 4mm to spade for HC terminals				
RS232 cable	RS232 9pin serial Cable				
USB cable	USB 2 Meter A male to B male				
USB to 9-pin RS232 (Option)	USB ~ 9-pin RS232 Serial Converter				
CDIR Cable	GPIB Interface Cable				