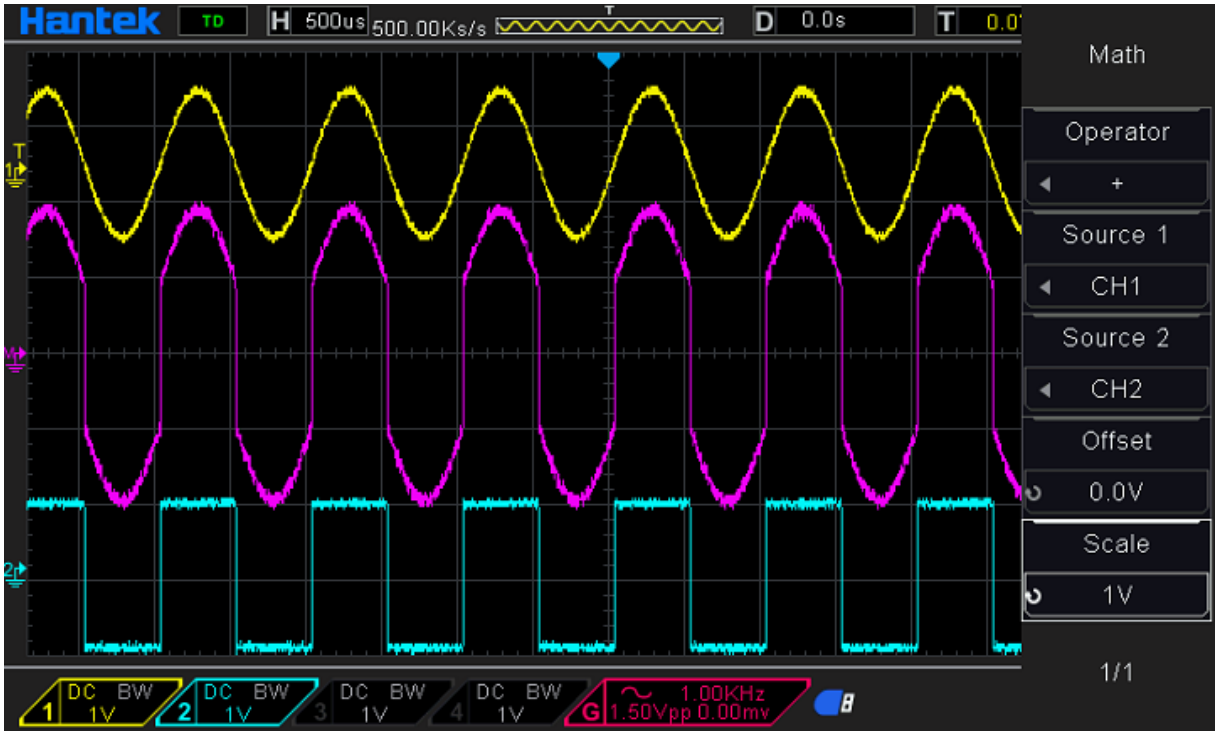
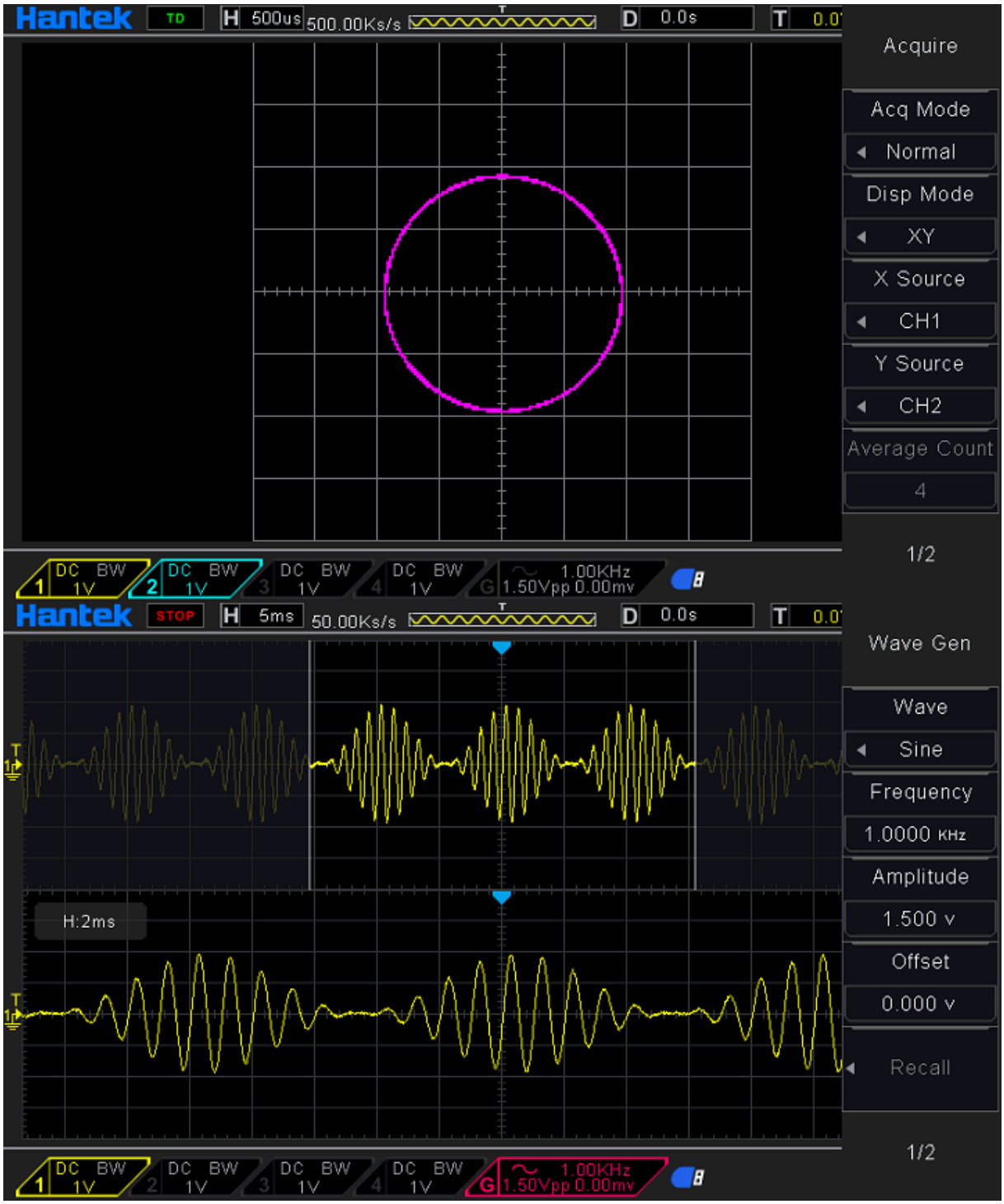
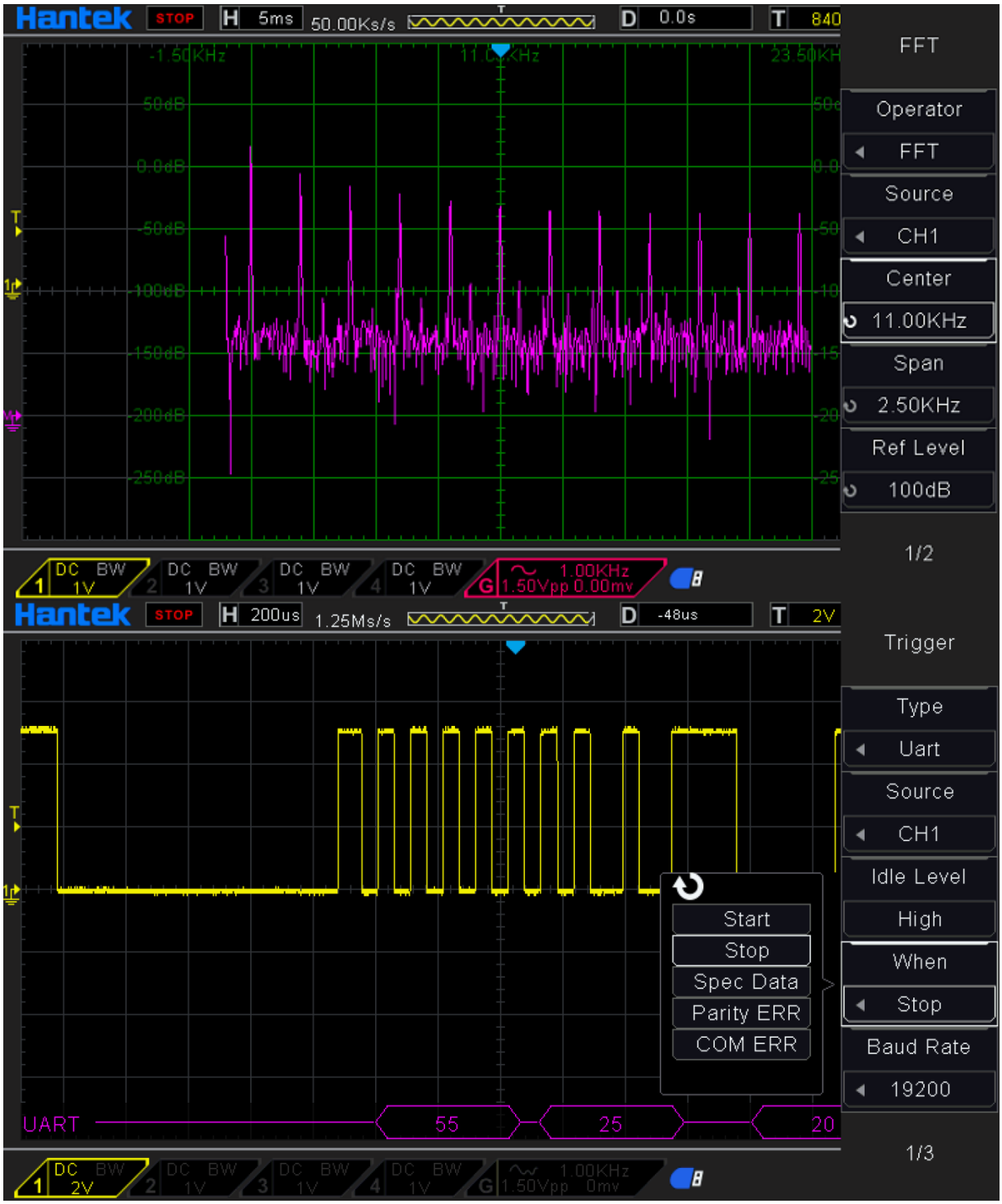
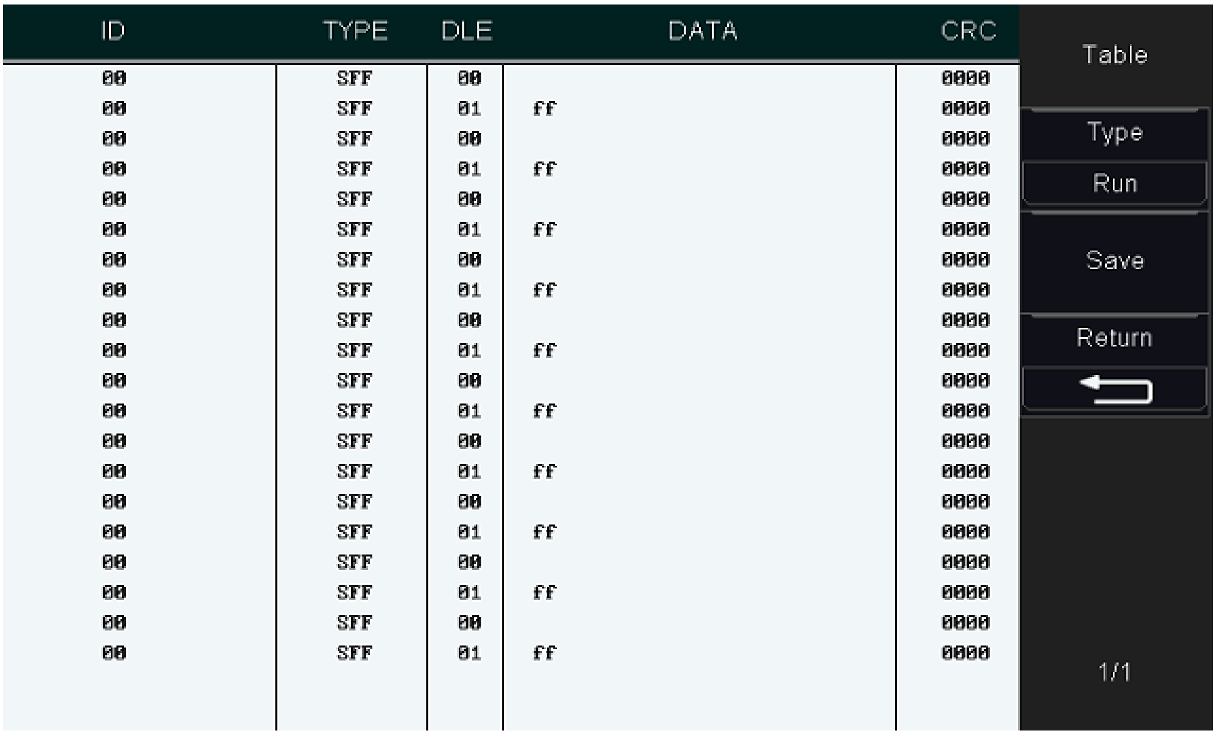
DSO4204B OSİLOSKOP

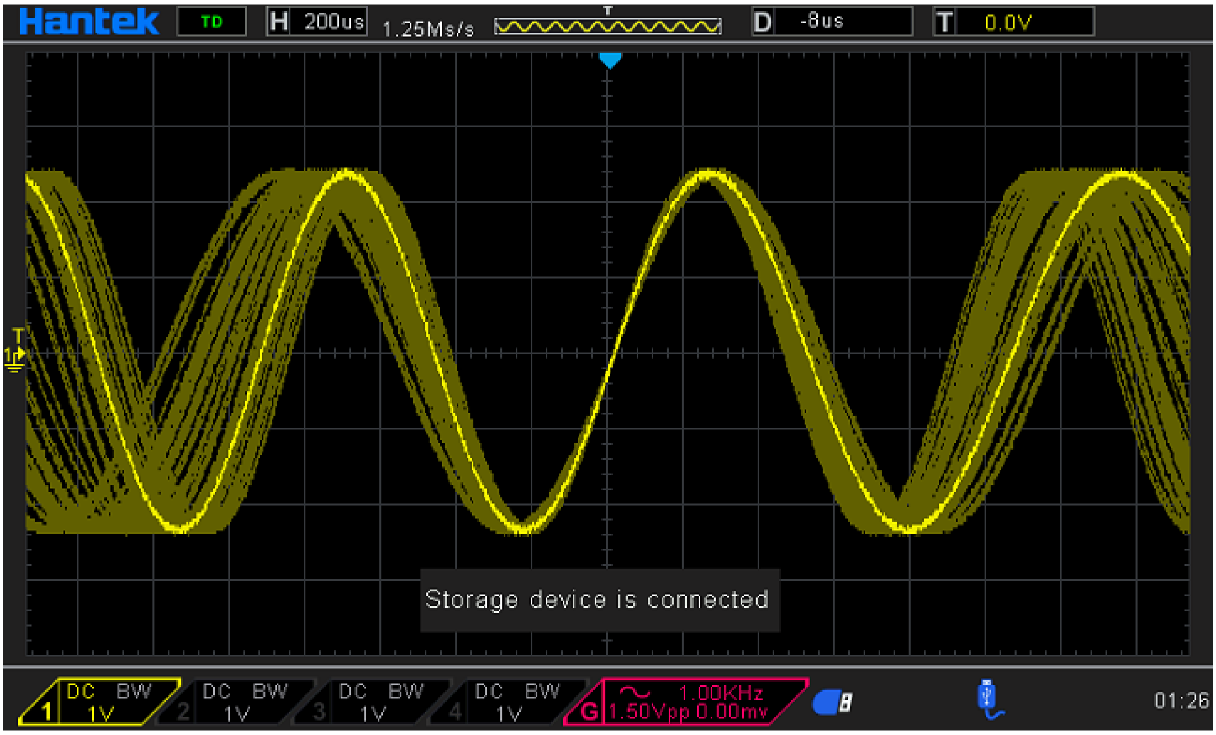


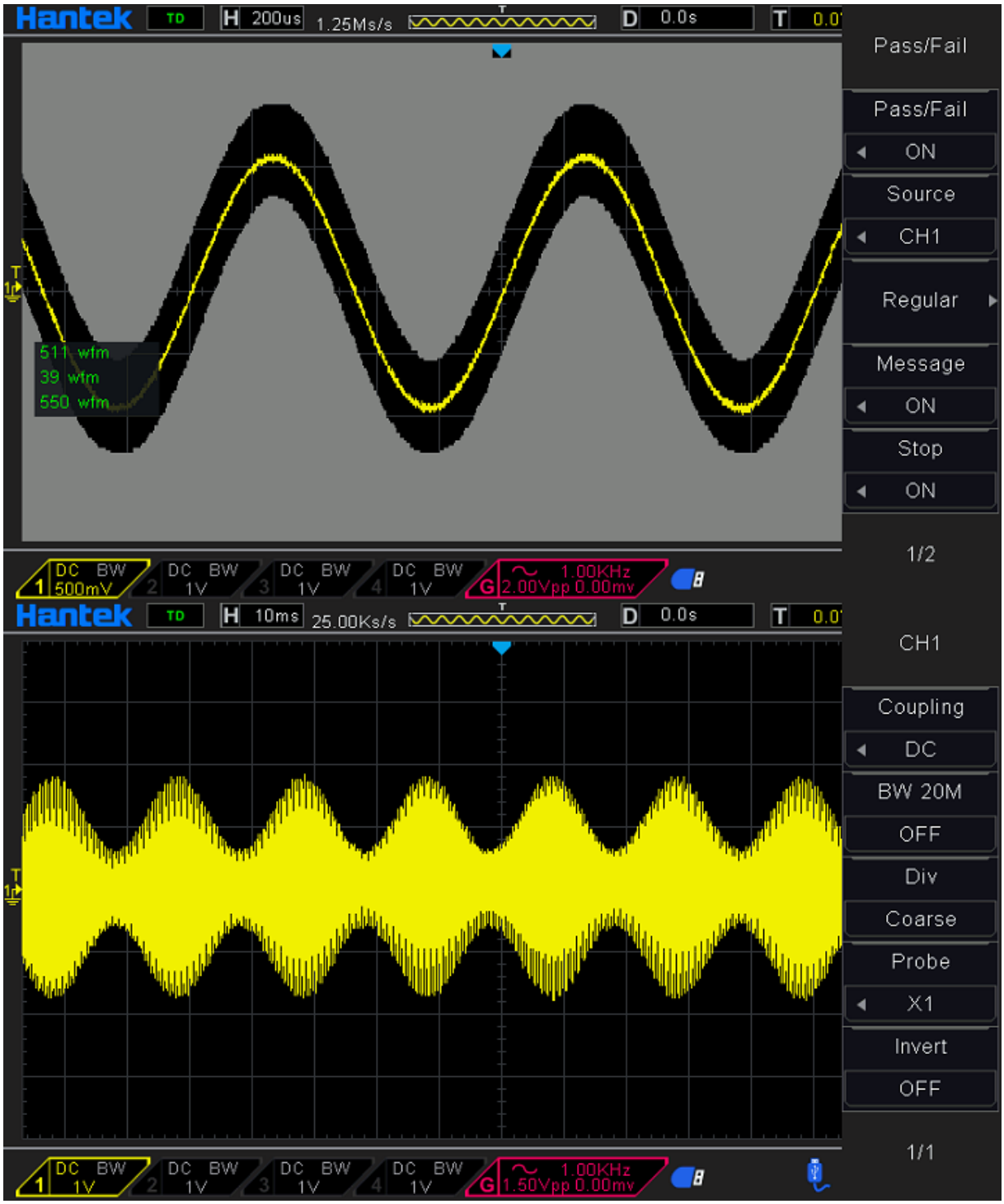

Hantek
TD
H 500us 500.00Ks/s
D 0.0s
T 0.0
Acquire
Acq Mode
Normal
Disp Mode
XY
X Source
CH1
Y Source
CH2
Average Count
4
1/2
DC BW 1V
DC BW 1V
DC BW 1V
DC BW 1V
1.00KHz
1.50Vpp 0.00mv
Hantek
STOP
H 5ms 50.00Ks/s
D 0.0s
T 0.0
Wave Gen
Wave
Sine
Frequency
1.0000 KHz
Amplitude
1.500 v
Offset
0.000 v
Recall
H:2ms
1/2

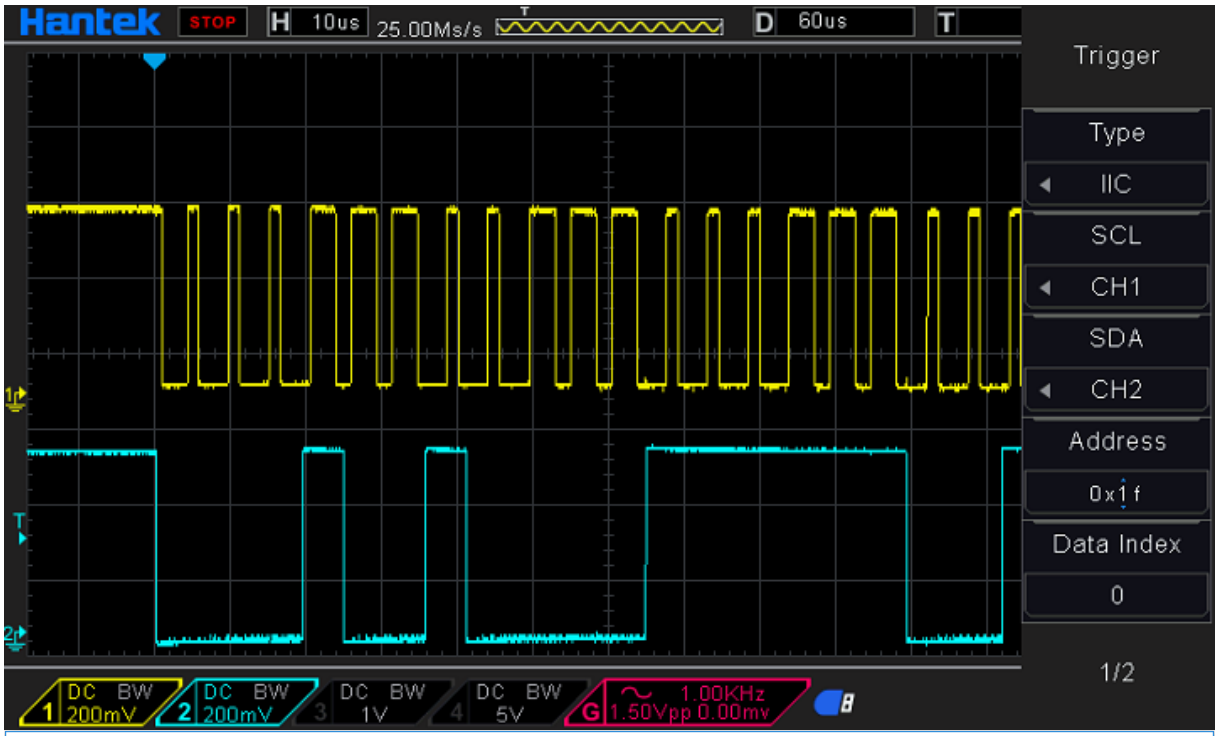

Hantek
STOP
H 5ms
50.00Ks/s
D 0.0s
T 840
-1.50KHz
11.00KHz
23.50KHz
50dB
0.0dB
-50dB
-100dB
-150dB
-200dB
-250dB
DC BW 1V
DC BW 1V
DC BW 1V
DC BW 1V
1.00KHz
1.50Vpp 0.00mv
Hantek
STOP
H 200us
1.25Ms/s
D -48us
T 2V
Start
Stop
Spec Data
Parity ERR
COM ERR
UART
55
25
20
DC BW 2V
DC BW 1V
DC BW 1V
DC BW 1V
1.00KHz
1.50Vpp 0mv
FFT
Operator
FFT
Source
CH1
Center
11.00KHz
Span
2.50KHz
Ref Level
100dB
1/2
Trigger
Type
Uart
Source
CH1
Idle Level
High
When
Stop
Baud Rate
19200
1/3

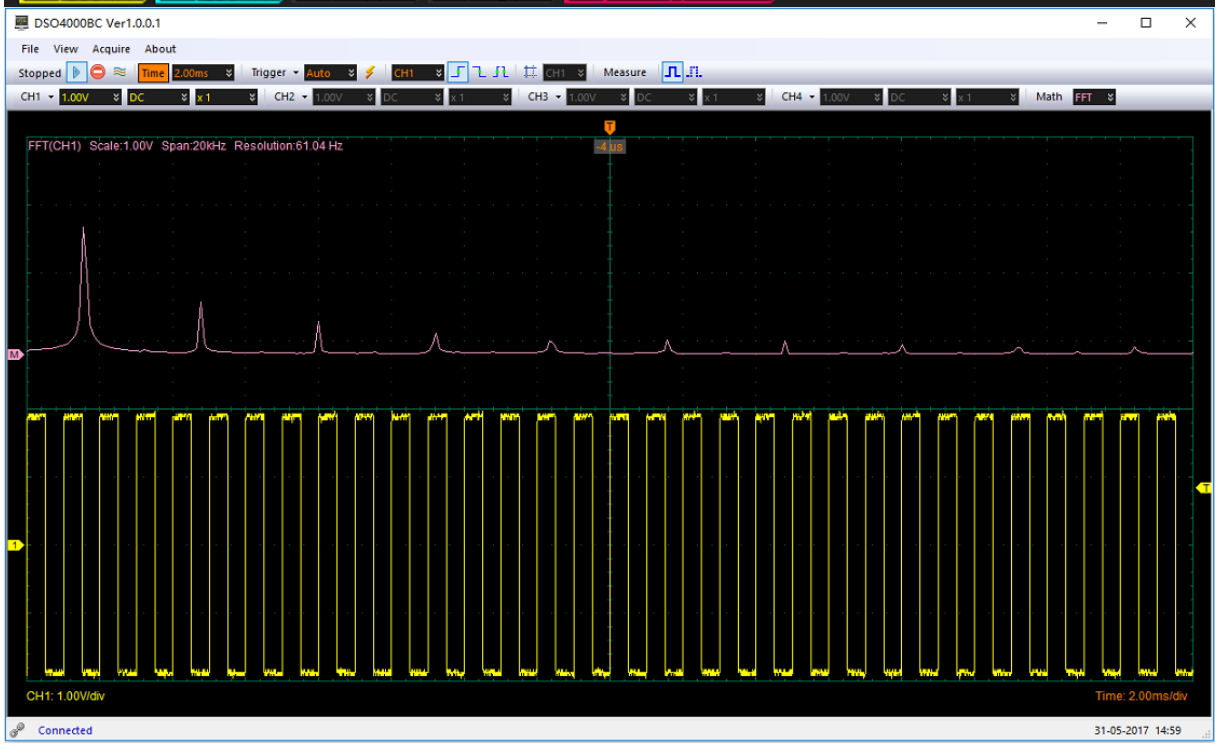


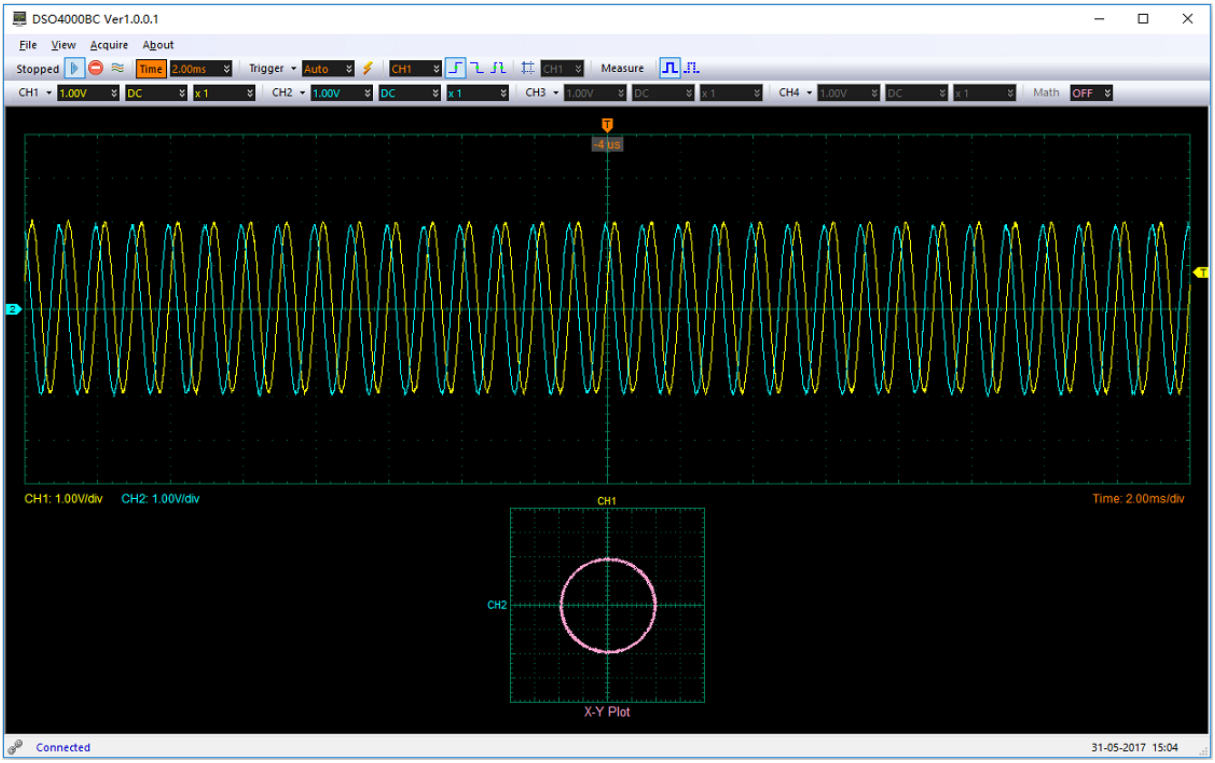
ID	TYPE	DLE	DATA	CRC
00	SFF	00		0000
00	SFF	01	ff	0000
00	SFF	00		0000
00	SFF	01	ff	0000
00	SFF	00		0000
00	SFF	01	ff	0000
00	SFF	00		0000
00	SFF	01	ff	0000
00	SFF	00		0000
00	SFF	01	ff	0000
00	SFF	00		0000
00	SFF	01	ff	0000
00	SFF	00		0000
00	SFF	01	ff	0000
00	SFF	00		0000
00	SFF	01	ff	0000
00	SFF	00		0000
00	SFF	01	ff	0000
00	SFF	00		0000
00	SFF	01	ff	0000




Hantek
TD
H 200us
1.25Ms/s
D 0.0s
T 0.0
511 wfm
39 wfm
550 wfm
DC BW 500mV
DC BW 1V
DC BW 1V
DC BW 1V
1.00KHz
2.00Vpp 0.00mv
Hantek
TD
H 10ms
25.00Ks/s
D 0.0s
T 0.0
DC BW 1V
DC BW 1V
DC BW 1V
DC BW 1V
1.00KHz
1.50Vpp 0.00mv
Pass/Fail
Pass/Fail
ON
Source
CH1
Regular
Message
ON
Stop
ON
1/2
CH1
Coupling
DC
BW 20M
OFF
Div
Coarse
Probe
X1
Invert
OFF
1/1


Hantek
STOP
H 10us
25.00Ms/s
D 60us
T
Trigger
Type
IIC
SCL
CH1
SDA
CH2
Address
0x1f
Data Index
0
1/2
DC BW
1 200mV
DC BW
2 200mV
DC BW
3 1V
DC BW
4 5V
G 1.00KHz
1.50Vpp 0.00mv


DSO4000BC Ver1.0.0.1
File View Acquire About
Stopped
Time 2.00ms
Trigger Auto
CH1
Measure
CH1 1.00V DC x1
CH2 1.00V DC x1
CH3 1.00V DC x1
CH4 1.00V DC x1
Math FFT
FFT(CH1) Scale:1.00V Span:20kHz Resolution:61.04 Hz
-4 us
CH1: 1.00V/div
Time: 2.00ms/div
Connected
31-05-2017 14:59



Model	DSO4254B	DSO4204B	DSO4104B	DSO4084B
Bandwidth	250MHz	200MHz	100MHz	80MHz
Horizontal				
Sample Rate Range	1GS/s			
Waveform Interpolation	(sin x)/x			
Record Length	Maximum 64K samples per single-channel;			
	Maximum 32K samples per dual-channel (4K, 32K optional)			
SEC/DIV Range	2ns/div~100s/div			
	1, 2, 5 sequence			
Sample Rate and Delay Time Accuracy	±50ppm			
Delta Time Measurement Accuracy (Full Bandwidth)	Single-shot, Normal mode ± (1 sample interval +100ppm × reading + 0.6ns)			
	>16 averages ± (1 sample interval + 100ppm × reading + 0.4ns)			
	Sample interval = s/div ÷ 200			
Vertical				
AD Converter	8-bit resolution, each channel sampled simultaneously			
VOLTS/DIV Range	500μV/div to 10V/div at input BNC			
Position Range	500μV/div~20mV/div, ±400mV			
	50mV/div~200mV/div, ±2V			
	500mV/div~2V/div, ±40V			
	5V/div~10V/div, ±50V			
Selectable Analog Bandwidth Limit, typical	20MHz			

Low Frequency Response (-3db)	≤10Hz at BNC			
Rise Time at BNC, typical	DSO4254B	DSO4204B	DSO4104B	DSO4084B
	<1.4ns	≤1.8ns	＜3.5ns	≤4.4ns
DC Gain Accuracy	±3% for Normal or Average acquisition mode, 10V/div to 10mV/div			
	±4% for Normal or Average acquisition mode, 5mV/div to 500μV/div			
	Note: Bandwidth reduced to 6MHz when using a 1X probe.			
Acquisition				
Acquisition Modes	Normal, Peak Detect, Average and HR			
Acquisition Rate, typical	Up to 2000 waveforms per second per channel (Normal acquisition mode, no measurement)			
Single Sequence	Acquisition Mode	Acquisition Stop Time		
	Normal, Peak Detect	Upon single acquisition on all channels simultaneously		
	Average	After N acquisitions on all channels simultaneously, N can be set to 4, 8, 16, 32, 64 or 128		
Trigger				
Mode	Auto, Normal			
Level	CH1~CH4	±4 divisions from center of screen		
	EXT	0~3.3V		
Holdoff Range	20ns ~ 10s			
Trigger Level Accuracy	CH1~CH4	0.2div × volts/div within ±4 divisions from center of screen		
	EXT	± (6% of setting + 40mV)		
Edge Trigger				
Slope	Rising, Falling, Rising&Falling			
Source	CH1~CH4/EXT			
Pulse Width				
Polarity	Positive, Negative			
Condition(When)	<, >, ≠, =			
Source	CH1~CH4			
Width Range	8ns ~ 10s			
Resolution	8ns			
Video Trigger				
Signal Standard	NTSC, PAL			
Source	CH1~CH4			
Sync	ScanLine, LinrNum, OddField, EvenField and AllField			
Slope Trigger				
Slope	Rising, Falling			
Condition(When)	<, >, ≠, =			
Source	CH1 ~ CH4			
Time Range	8ns ~ 10s			
Resolution	8ns			
Overtime Trigger				
Source	CH1~CH4			
Polarity	Positive, Negative			

Time Range	8ns ~ 10s
Resolution	8ns
Window Trigger	
Source	CH1~CH4
Pattern Trigger	
Pattern	0: Lower level; 1: High level;
Level	CH1~CH4
Interval Trigger	
Slope	Rising, Falling
Condition(When)	<, >, ≠, =
Source	CH1~CH4
Time Range	8ns ~ 10s
Resolution	8ns
Under Amp	
Polarity	Positive, Negative
Condition(When)	<, >, ≠, =
Source	CH1~CH4
Time Range	8ns ~ 10s
Resolution	8ns
UART Trigger	
Condition(When)	Start, Stop, Data, Parity Error, COM Error
Source(RX/TX)	CH1~CH4
Data format	Hex
Condition(When)	<, >, ≠, =
Data Length	1 byte
Data Length	5 bit, 6 bit, 7 bit, 8 bit
Parity Check	None, Odd, Even
Idle Level	High, Low
Baud Rate(Selectable)	110/300/600/1200/2400/4800/9600/14400/19200/38400/57600/115200/230400/380400/460400 bit/s
Baud Rate (Custom)	300bit/s~334000bit/s
LIN Trigger	
Condition(When)	Interval Field, Sync Field, Id field, Sync Id Error, Identifier, Id and Data
Source	CH1~CH4
Data format	Hex
Baud Rate (Selectable)	110/300/600/1200/2400/4800/9600/14400/19200/38400/57600/115200/230400/380400/460400 bit/s
Baud Rate (Custom)	300bit/s~334000bit/s
CAN Trigger	
Condition(When)	Start Bit, Remote Frame, Data Frame Id, Frame Id, DataFrame Id A, Error Frame, All Error, Ack Error, Overload Fram
Source	CH1~CH4
Data format	Hex
Baud Rate (Selectable)	10000, 20000, 33300, 500000, 62500, 83300, 100000, 125000, 250000, 500000, 800000, 1000000
Baud Rate (Custom)	5kbit/s~1Mbit/s

SPI Trigger		
Source (CS/CLK/Data)	CH1~CH4	
Data format	Hex	
Data Length	4, 8, 16, 24, 32	
IIC Trigger		
Source (SDA/SCL)	CH1~CH4	
Data format	Hex	
Data Index	0~7	
When(Condition)	Start, Stop, No Ack, Address, Data, Restart	
Inputs		
Input Coupling	DC, AC or GND	
Input Impedance, DC coupled	20pF±3 pF， 1MΩ±2%	
Probe Attenuation	1X, 10X	
Supported Probe Attenuation Factors	1X, 10X, 100X, 1000X	
Overvoltage Category	300V CAT II	
Maximum Input Voltage	$300V_{RMS}$ (10X)	
Measurements		
Cursors	Voltage difference between cursors: ΔV Time difference between cursors: ΔT Reciprocal of ΔT in Hertz (1/ΔT)	
Automatic Measurements	Frequency, Period, Average, Pk-Pk, RMS, PeriodRms, Min, Max, RiseTime, FallTime, + Width, - Width, + Duty, - Duty, Vbase, Vtop, Vmid, Vamp, Overshoot, Preshoot, PeriodAvg, FOVShoot, RPREShoot, BWidth, FRR, FFF, FRF, FFR, LRR, LRF, LFR and LFF	
General Specifications		
Display		
Display Type	7 inch 64K color TFT (diagonal liquid crystal)	
Display Resolution	800 horizontal by 480 vertical pixels	
Display Contrast	Adjustable	
Probe Compensator Output		
Output Voltage, typical	About 2Vpp into ≥1MΩ load	
Frequency, typical	1kHz	
Power Supply		
Supply Voltage	100-120VACRMS(±10%),45Hz to 440Hz， CAT Ⅱ 120-240VACRMS(±10%),45Hz to 66Hz， CAT Ⅱ	
Power Consumption	<30W	
Fuse	T，3.15A，250V，5x20mm	
Environmental		
Operating Temperature	0~50 °C (32~122 °F)	
Storage Temperature	-40~+71 °C (-40~159.8 °F)	
Humidity	≤+104℉(≤+40°C): ≤90% relative humidity	
	106℉~122℉ (+41°C ~50°C): ≤60% relative humidity	
Cooling Method	Convection	
Altitude	Operating and Nonoperating	3,000m（10,000 feet）

	Random Vibration	0.31g_{RMS} from 50Hz to 500Hz,
		10 minutes on each axis
	Nonoperating	2.46g_{RMS} from 5Hz to 500Hz
		10 minutes on each axis
Mechanical Shock	Operating	50g, 11ms, half sine
Mechanical		
Dimension	318 x 110 x 150mm(L x W x H)	
Weight	2900g	