# Agilent 53200 RF/Universal Frequency Counter/Timers Models: 53210A, 53220A and 53230A

The Agilent 53200 Series is a new generation of 350 MHz RF/universal frequency counter/timers with optional 6 GHz or 15-GHz inputs. The first frequency counters with LXI Class C compliance, the 53200 family is built with LAN and USB I/O for ease of connectivity and data collection. The combination of high-speed measurements and built-in analysis and graphical display provides new functionality that has not previously been available in basic frequency counter/timers



## **Key features**

- More frequency:
   350 MHz baseband frequency, 6- or 15-GHz optional microwave channels
- More resolution:
   Up to 12 digits/sec and 20-ps single-shot time interval
- More information accessibility:
   1M reading memory, up to 75,000 frequency readings/sec, strip chart/trend plot, cumulative histograms
- More connectivity:
   First LXI-compliant counters (LXI/Ethernet, USB, GPIB connectivity)
- More measurement capability:
   Gap-free/continuous measurements and timestamping for basic modulation domain analysis and optional pulse/burst microwave measurements. The optional battery supports remote usage and helps maintain accurate measurements by keeping the timebase warm at all times.
- Frequency counter emulation mode 53131A, 53132A, 53181A





## **Agilent 53200 RF/Universal Frequency Counter/Timers**

Product specifications	<b>53210A</b> RF frequency counter	<b>53220A</b> universal frequency counter/timer	<b>53230A</b> universal frequency counter/timer
Channels	Ch 1: 350 MHz Opt ch 2: 6 or 15 GHz		2: 350 MHz 3 or 15 GHz
Frequency resolution	10 digits/sec	12 dig	jits/sec
Time interval resolution	NA	100 psec	20 psec
Measurements	Frequency, period, frequency ratio, max/min/peak to peak input voltage	Frequency, period, frequency ratio, max/min/peak to peak input voltage, time interval, single period, pulse width, rise/fall time, duty cycle, phase, totalize	Frequency, period, frequency ratio, max/min/peak to peak input voltage, time interval, single period, pulse width, rise/fall time, duty cycle, phase, totalize, timestamp/MDA
Burst/pulse microwave measurements (optional)	NA		Carrier frequency, PRI, PRF, PW
Math	Smoothing (Reading Moving Average), Scaling, $\Delta$ -Change, Null		
Statistics	Mean, standard deviation, max, peak-to-peak, count	· ·	l deviation, max, ınt, Allan deviation
Graphical display	Digits, trend, histogram, limit test, markers		

For more details on the Agilent 53200 Series and ordering information see:

Agilent 53200 Series Datasheet, literature number 5990-6283EN

Agilent 53200 Family Brochure, literature number 5990-6339en

For more information on the Agilent 53200 Series, please visit: **www.agilent.com/find/** 

**FrequencyCounterSpotlight** 

To find a distributor in your area, go to: www.agilent.com/find/distributors

### **Options**

Model No.	Description
Option 010	Ultra high-stability OCXO timebase
106/115	Add 6/15 GHz CW microwave channel
203	Move microwave channel input to rear
150	Pulse microwave software (53230A only)
201	Add rear panel parallel inputs for Ch 1 and Ch 2
300	Add internal lithium ion battery pack and charger

### Accessories

Model No.	Description
1250-1476	Adapter: type-N (m) to BND (f), DC to 4 GHz
N2874A	Passive probe: 10:1, 1.5 GHz, 1.3 m
N2863A	Passive probe: 10:1, 300 MHz, 1.2 m
34190A	Rack mount kit
34191A	2U dual flange kit
34194A	Dual lock link kit
34131A	Transit case

Recommended service options www.agilent.com/find/removealldoubt

R-51B-001-3C Return-to-Agilent warranty – extended to 3 years
R-50C-011-3 Return-to-Agilent calibration – 3 years

Pricing and technical data subject to change without notice.

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