

## Model 2640 2.0 GHz Handheld RF Field Strength Meter

### Data Sheet



### Model 2640 2.0 GHz Handheld RF Field Strength Meter

The model 2640 is a battery operated, hand held RF Field Strength Meter with a measurable frequency range of 100kHz to 2000MHz.

#### Features

- Battery operated portability
- 100kHz to 2GHz Measurement range
- Hand held and battery operated portability
- 100kHz to 2GHz Measurement range
- Built-in 2GHz frequency counter
- Detects wide band and narrow band FM, AM & SSB signals
- Phase lock loop for precise frequency tuning
- Up to 160 channels may be scanned and displayed
- Audio output with built-in speaker
- Detachable antenna included
- Back-lit display
- Storable setups and displays
- RS-232 Interface

The B&K Precision 2640 handheld RF Field Strength Analyzer is optimized to analyze signals from many different sources for multiple applications. The 2640 has a wideband reception range of 100 kHz to 2,000 MHz. The characteristic of frequency response of the B&K Precision 2640 is calculated by memorized calculation data from a "look up table", and so it enables the 2640 to measure accurate levels and makes easy analysis of a wide range of frequency bands.

The B&K Precision 2640 provides various functions and has a user-friendly interface which makes it easy and simple to use. The handheld RF Field Strength Analyzer is ideal for users to test, install and maintain Mobile Telecommunications Systems, Cellular and Cordless Phone, CB Paging, Paging Systems, Cable and Satellite TV Systems as well as antenna site measurements and maintenance. The B&K Precision 2640 supports RS 232C serial communication and has included GUI software. So, user can control the 2640 easily after connecting the B&K Precision 2640 with a personal computer, and can utilize the analyzed data after converting or saving numerical value or graph.

## Functions

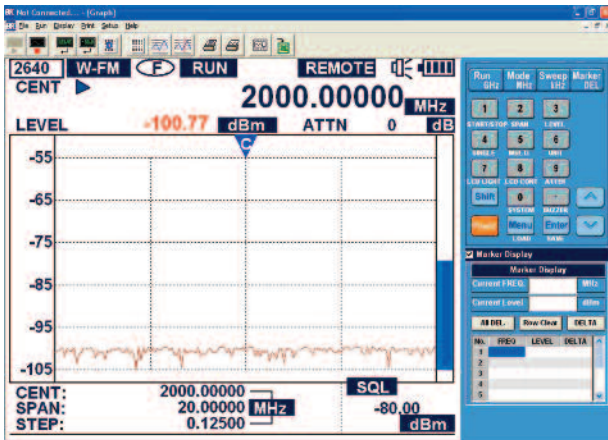
### RF Field Strength Analyzer

- Spectrum: Peak Search, Marker to Center, Channel Power Function
- Internal Attn.: The input range can be extended by internal Max 10 dB Attn. function.
- Sweep Mode: Single Run, Free Run, Squelch Run Selectable
- Squelch Function: The Squelch Level may be adjusted to any value from the reference level to Full Scale.
- Copy Function: The Copy Set mode allows the contents of the Channels edit Setup and Data memories to be copied to an external device. Data may also be written into these memories from external device

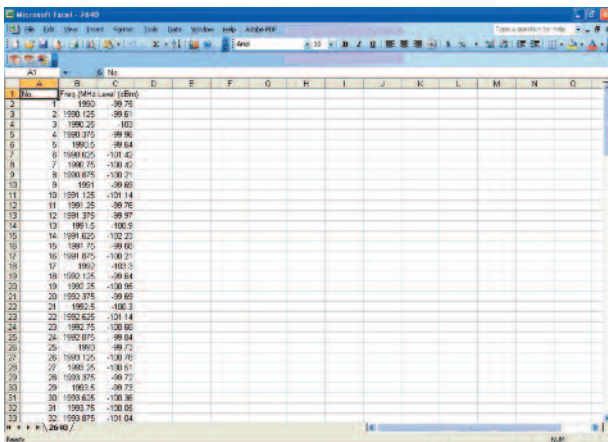
### Frequency Counter

- Frequency range: 35 MHz to 2,000 MHz
- No. of digits: 7 digits
- Resolution: 1 kHz

The included AK2640 software and interface cable allows full control of the 2640 via a PC through the RS232C interface. The software allows the saving, recalling and analyzing of current and saved waveforms. The 2640 can save up to 100 waveforms and states in to it's internal memory.



Screenshot of the AK2640 software



Screenshot of the exported CSV data

## Specifications

model

2640

2640	
<b>Frequency</b>	
Frequency Range	100 kHz to 2,000 MHz
Resolution	Min. 6.25kHz Multiples
Accuracy	TXO : $\pm 3$ PPM / Display : $\pm 1.5$ PPM
W-FM / N-FM / AM / SSB	Wide FM : Approx. 180 kHz @-6 dB Narrow FM : Approx. 12.5 kHz @-6 dB AM/SSB : Approx. 2.4 kHz @-6 dB
Step Range	AM, SSB, Narrow FM : 6.25kHz, 12.5kHz Wide FM : 6.25~125kHz (Multiple of 6.25 kHz) 125~2500kHz (Multiple of 125 kHz)
Span Range	AM, SSB, Narrow FM : 1MHz, 2MHz Wide FM : 1~20MHz (Multiple of 1 MHz) 20~400MHz (Multiple of 20 MHz)
Frequency Selection Mode	Center, Start/ Stop, Span
<b>Amplitude</b>	
Measurement Range	-45 dBm to -110 dBm
Average noise Level	Wide FM : -100 dBm Max. Narrow FM : -110 dBm Max. AM/SSB : -100 dBm Max.
Amplitude Units	dBm, dBmV, dBuV
Reference Level Accuracy	$\pm 3.0$ dB @ under 600KHz $\pm 2.0$ dB @ over 600KHz
Reference Level Range	0 dBm to -80 dBm
Log Scale	0.2 dB/DIV min, in 0.25 dB Span (5 Display Division)
Internal Attn	10 dB
Internal Attn Accuracy	$\pm 1.0$ dB (@25)
<b>Sweep</b>	
Speed	Min. 500 msec
Trigger Source	Narrow FM / Wide FM / AM / SSB
Trigger Mode	Free Run /Single Run /Continuous /Wave Squelch Run
Trigger Level	TTL Level
Marker Mode	Maker / Delta Maker
<b>Memory</b>	
Trace & Setup Storage	Max 100 Waveforms and 100 States
<b>Display</b>	
Type	Mono STN LCD
Display Resolution	192 Pixels X 192 Pixels
LCD Light	On / Off
<b>Frequency Counter</b>	
Frequency Range	35 MHz to 2,000 MHz
Resolution	7 Digits
Accuracy	$\pm 50$ PPM $\pm 1$ COUNT
Sampling Time	1 sec
Input Sensitivity	35 MHz to 2,000 MHz : 150 mVrms 20 MHz to 1,000 MHz : 100 mVrms
Input Impedance	50 Ohms
Max. Input Voltage	5 Vrms Max.
<b>Spectrum Input Port</b>	
RF Input Connector	N type Female, 50 Ohms
Max Input Level	Max. +10 dBm, 5Vrms
<b>Operation Environment</b>	
Operating Temperature	0° C to 40° C
Humidity	35% RH to 85% RHP
Storage Temperature	10° C to 50° C
<b>Power Source</b>	
Battery Power Source	AA Type Ni-MH Rechargeable Battery $\times 6$ PCS
Battery Specification	AA Type 1.2 V, 2,700 mAh Rechargeable Nickel Metal Hydride Battery
Adapter	SMPS Type AC Adapter (DC 12 V Output) Car-Adapter (DC 12 V Output)
Auto Power On/Off	Off/ 5 min./ 10 min./ 20 min./30 min.
<b>Physical Specifications</b>	
Dimension	4 "(W) $\times$ 9 "(H) $\times$ 1.8 "(D)
Weight	Approx. 0.66 Kg(1.45 lbm) (including Antenna, except Battery)
<b>Accessories</b>	
<b>One Year Warranty</b>	
SUPPLIED: Antenna (Receive Only), SMPS Type AC Adapter, Fuji-AA type NI-MH Rechargeable Battery (6 PCS, 1.2 V 2,700 mAh), Manual, Coaxial Cable, Earphone, Carrying Case, Carrying Belt, RS-232C Cable, Adapter(N-BNC), Software for PC Application	

Model 2640