

MP7600

6GHz RF RECORDER & PLAYER

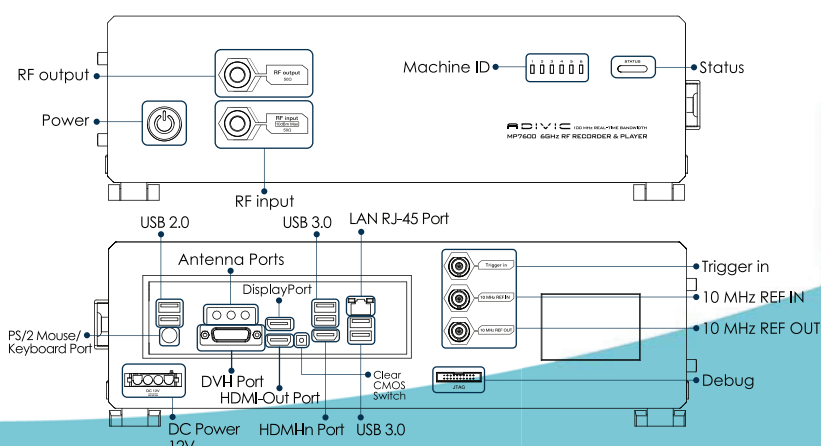
PRODUCT BROCHURE

ADIVIC
— RF TEST & MEASUREMENT —



MP7600 Features

- Adjustable instantaneous bandwidth 1 MHz to 100 MHz
- Frequency coverage from 300 KHz to 6.0 GHz
- 250 MSPS ADC sampling rate
- 16-Bit ADC/DAC resolution, 96 dB dynamic range
- Smart AGC to extend usable dynamic range > 150dB
- High linearity to accommodate strong & weak signal
- 1PPS, IRIG-B support (Optional)
- Additional traces for maximum/minimum holds
- 20+ markers for easy signal identification
- Data formats compatible to MATLAB
- Software utility support including I/Q data extractor and File segment
- Matrix System supports 7 units max. in parallel (Optional)
- 4 X 2.5"SSD internal drive bays (4 X 480 GB by default, 4 X 1 TB upgradable)



Mechanical
Dimensions : 355.8mm X 302.4mm X 102.4mm
Weight : 9Kg

RF Signal Analyzer Specifications

Parameter	Specifications
Input Frequency Range	300KHz ~ 6000MHz
Real - time bandwidth	50MHz@300KHz ~ 50MHz 20MHz@ Fc: >50 ~ 100MHz 40MHz@ Fc: >100 ~ 400MHz 100MHz@ Fc: >400 MHz and above
Frequency resolution	10Hz/step minimum
Resolution Bandwidth(RBW)	500Hz to 5MHz
Max input power	+20dBm peak , +10dBm average
Input noise density	<-160dBm/Hz
Input power accuracy @(+20 to -75 dBm)	<+/-1.0 dB @ <=3GHz <+/-1.5dB @ >3GHz
Phase Noise	Phase noise <-100dBc @1KHz offset @2.4GHz Phase noise <-95dBc @1KHz offset @5.8GHz
LO Leakage *	<-50dBc
Sideband image *	<-50dBc
Third order input inter -modulation distortion(IMD3)	<-70dBc@ -10dBm (-13dBm two tone) ,
Input Return loss	<-10dB
ADC resolution	16 Bits
Sample rate	250MS/s
Initial achievable accuracy	+/-50 ppb maximum (OCXO) @25C, after 60 minutes warm up
Temperature stability	+/-20 ppb maximum (OCXO) @0 C ~ 40 C,
Aging	+/-1 ppb maximum (OCXO) per day +/-100 ppb maximum (OCXO) per year
Operating Temperature	0 C to 40 C
Warm -up time	>30 minute

* Test condition @ after calibration, AGC, ADC input Ref(-15), CW Signal
dBc= Input signal level – LO or Sideband Image level

RF Signal Generator Specification

Parameter	Specifications
Input Frequency Range	300KHz~6000MHz
Real time bandwidth	50MHz@300KHz ~ 50MHz 20MHz@ Fc: >50 ~ 100MHz 40MHz@ Fc: >100 ~ 400MHz 100MHz@ Fc: >400 and above
Frequency resolution	10Hz step minimum
Max Output power@ CW	0dBm
Output noise density	<-160dBm/Hz
Power Accuracy@(0 to -95 dBm)	+/-1.0dB @ -100dBm ~0dBm +/-2.0dB @ <-100dBm
Phase Noise	Phase noise <-100dBc: 1KHz offset @2.4GHz Phase noise <-95dBc: 1KHz offset @5.8GHz
LO leakage*	<-50dBc
sideband image*	<-50dBc
Third order input inter-modulation distortion(IMD3)	<-60dBc@-10dBm (two -13dBm Tone)
Output Return loss	<-10dB
DAC resolution	16 Bits
Sample rate	1000MS/s
Initial achievable accuracy	+/-50 ppb maximum (OCXO) @25C, after 60 minutes warm up
Temperature stability	+/-20 ppb maximum(OCXO) @0 C ~ 50 C range, referenced to 25 C
Aging@range, referenced to 25 C	+/-1 ppb maximum(OCXO) @ by day +/-100 ppb maximum(OCXO) & by year
Operating Temperature	0 C to 40 C
Warm-up time	>30 minute

*Test condition @ after calibration, AGC, ADC input Ref(-15), CW Signal
dBc= Output signal level – LO or Sideband Image level

Max & Min Hold

To inspect RF signal dynamic range

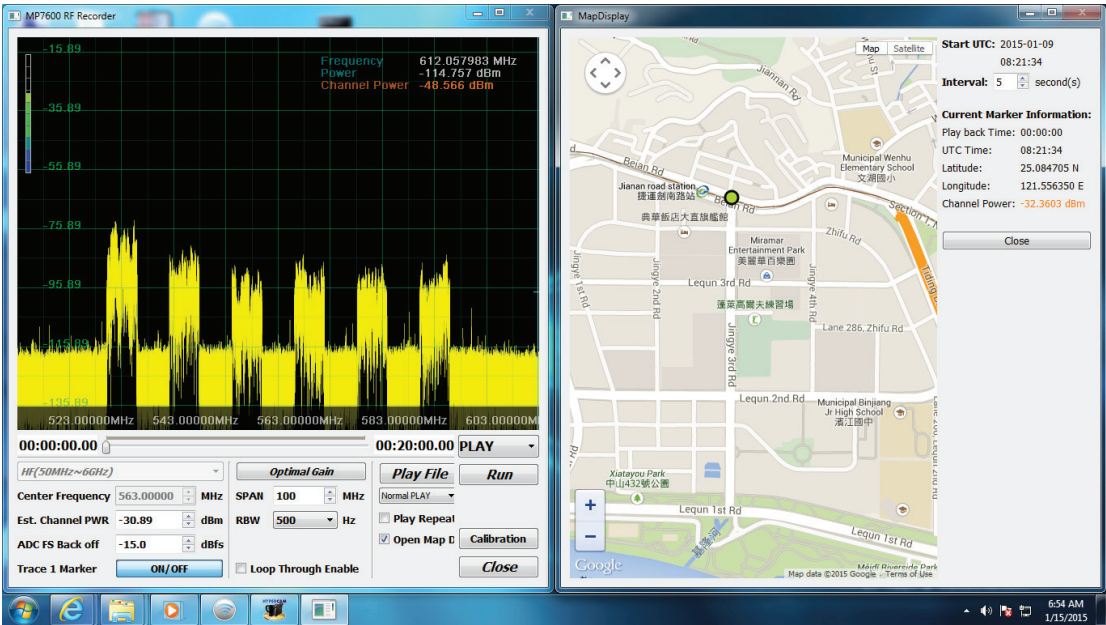


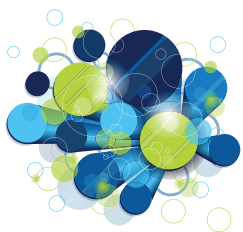
Loop Through Function

To inspect RF signal while recording

GPS

To record the RF signal position with G-mouse





Camera

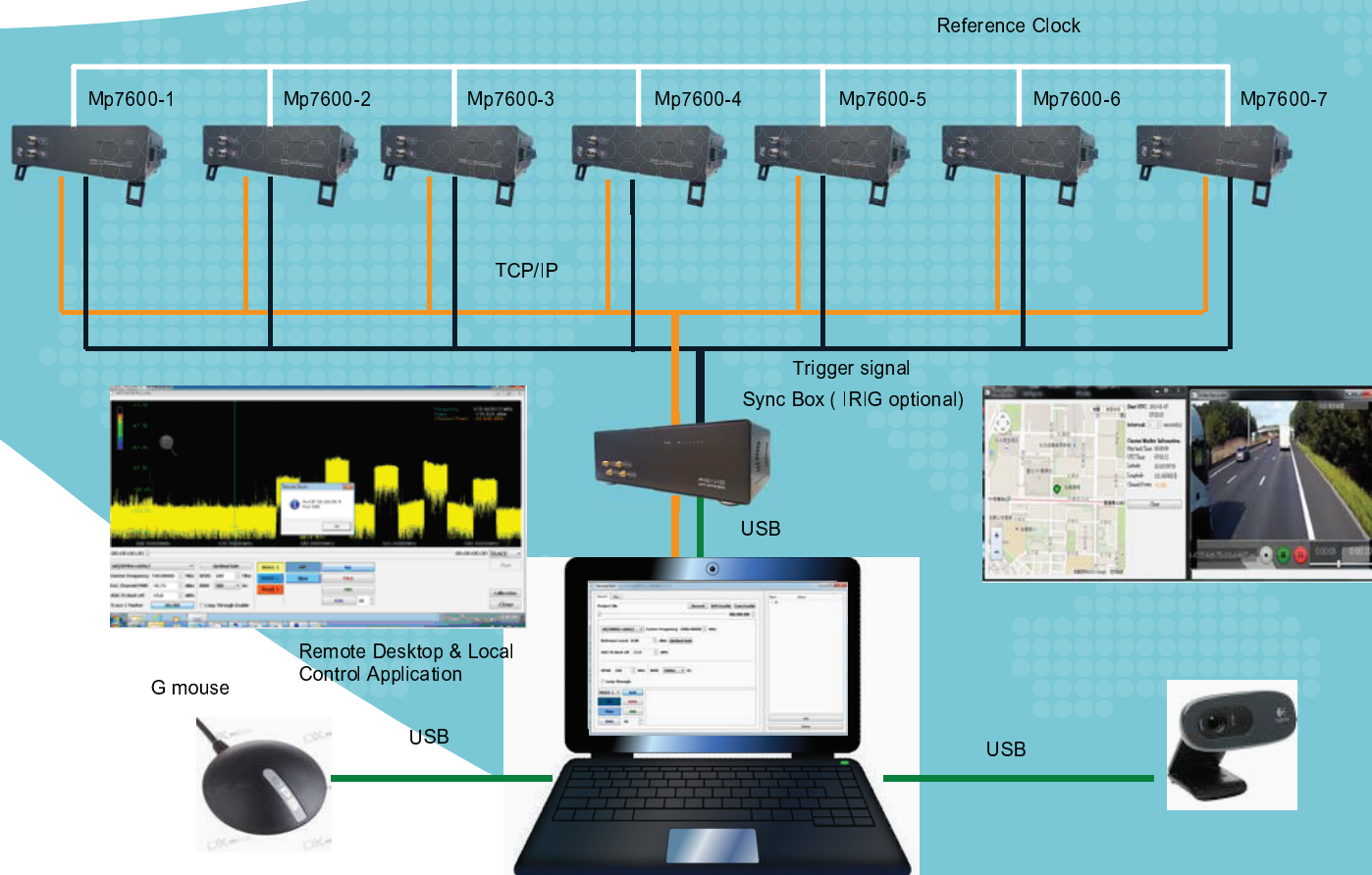
Can be used to generate a visual record of the rf capture area.

700MHz Wideband Recording

Allow the simultaneous recording and playback of 700MHz bandwidth.

Wideband : 100MHz X 7

Diversity : Antenna X 7



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