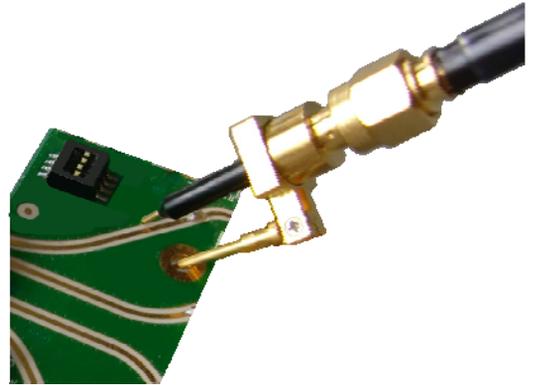


# J1512A 7.5 GHz Passive Probe Set Ideal for High-speed Digital System Evaluation

MP2100A BERTWave Series



## Features

- 7.5 GHz Frequency bandwidth (–3 dB)
  - Ideal probe for **GHz-band sampling oscilloscope**
- Low Input Resistor of less than 0.5 pF
  - Choice of **10:1 or 20:1 attenuation ratio**
  - Low capacity input ideal for monitoring high-speed signal waveforms
- Compact ground lead
  - **Short input ground lead** ideal for high-frequency circuit evaluation



<b>Frequency bandwidth (–3dB)</b>	DC to 6 GHz (min.), 7.5 GHz (typ.)
<b>Standard configuration</b>	Cable assembly, end sleeve 1 pc, resistor (450 Ω) 2 pcs, resistor (950 Ω) 2 pcs, probe 1 pc, manual 1 page
<b>Attenuation ratio</b>	10:1 within ±3.5% (450 Ω) 20:1 within ±3.5% (950 Ω)
<b>Input resistor</b>	450 Ω ±2% 950 Ω ±2% (each selectable)
<b>Input capacity</b>	450 Ω: 0.25 pF (typ.) 950 Ω: 0.4 pF (typ.)
<b>Maximum input voltage</b>	20 Vrms, 40 Vac peak
<b>Cable length</b>	1 m ±20 mm
<b>Shape</b>	Input terminal length: 22.4 mm, extendible ground wire
<b>Connector</b>	SMA
<b>Operating environment</b>	Temperature: 5° to 35°C Relative Humidity: 20% to 80%, no condensation
<b>Storage environment</b>	Temperature: –20° to 60°C Relative Humidity: 20% to 80%, no condensation

# Direct Measurement without SMA connector

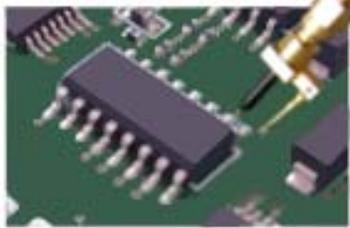
■ Measure on-board device signal level...

✗ The trouble shoot in the part where the SMA connector has not adhered cannot be done.



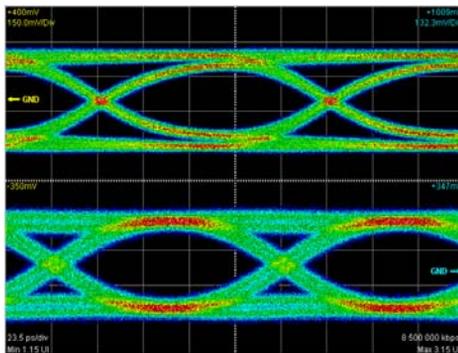
○ Conduction and level of the signal can be checked in the probe.

○ It is possible to measure it without the clock input because the clock recovery can be built into.

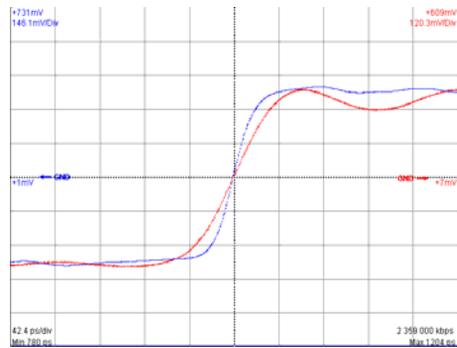


Direct monitoring with probe

The waveform of the GHz can be observed for low loss because frequency bandwidth of probe is DC to 7.5 GHz.



Actual waveforms (EYE)  
(Bit Rate: 8.5Gbit/s, Pattern: PRBS 31)



Actual waveforms (Pulse)  
(Bit Rate: 2.25Gbit/s, Pattern: 01 signals)  
Rise Time: 17.00 (SMA)  
40.16 (probe)

## Ordering Information

### MP2100A BERTWave

Model/Order No.	Name
Main Frame	
MP2100A	BERTWave
Option	
MP2100A-001	Dual Electrical Receiver
MP2100A-003	Optical/Single-ended Electrical Receiver
MP2100A-005	Extended PPG/ED Channel
MP2100A-030	GPIO
MP2100A-037	FC Connector
MP2100A-038	ST Connector
MP2100A-039	DIN47256 Connector
MP2100A-040	SC Connector
MP2100A-050	XFP Slot
MP2100A-051	SFP + Slot
MP2100A-055	Clock Recovery for Eye/Pulse Scope
MP2100A-061~069	Filter Bunk
MP2100A-070~085	Filters
MP2100A-090	Bit Rate Extension for PPG/ED
Maintenance Service	
MP2100A-ES310	Extended Three Year Warranty Service
MP2100A-ES510	Extended Five Year Warranty Service

### MP2102A BERTWave SS

Model/Order No.	Name
Main Frame	
MP2102A	BERTWave SS
Option	
MP2102A-021	Dual Electrical Receiver
MP2102A-023	Optical/Single-ended Electrical Receiver
MP2102A-030	GPIO
MP2102A-037	FC Connector
MP2102A-038	ST Connector
MP2102A-039	DIN 47256 Connector
MP2102A-040	SC Connector
MP2102A-055	Clock Recovery
MP2102A-056~065	Filter Bunk
MP2102A-070~085	Filters
MP2102A-130	GPIO (Retrofit)
Maintenance Service	
MP2102A-ES310	Extended Three Year Warranty Service
MP2102A-ES510	Extended Five Year Warranty Service
Optional Accessories	
Model/Order No.	Name
J1512A	7.5G Passive Probe Set
Z1507A	7.5GHz passive probe set resistor
J1349A	Coaxial Cable 0.3 m
J1342A	Coaxial Cable 0.8 m
J1343A	Coaxial Cable 1.0 m