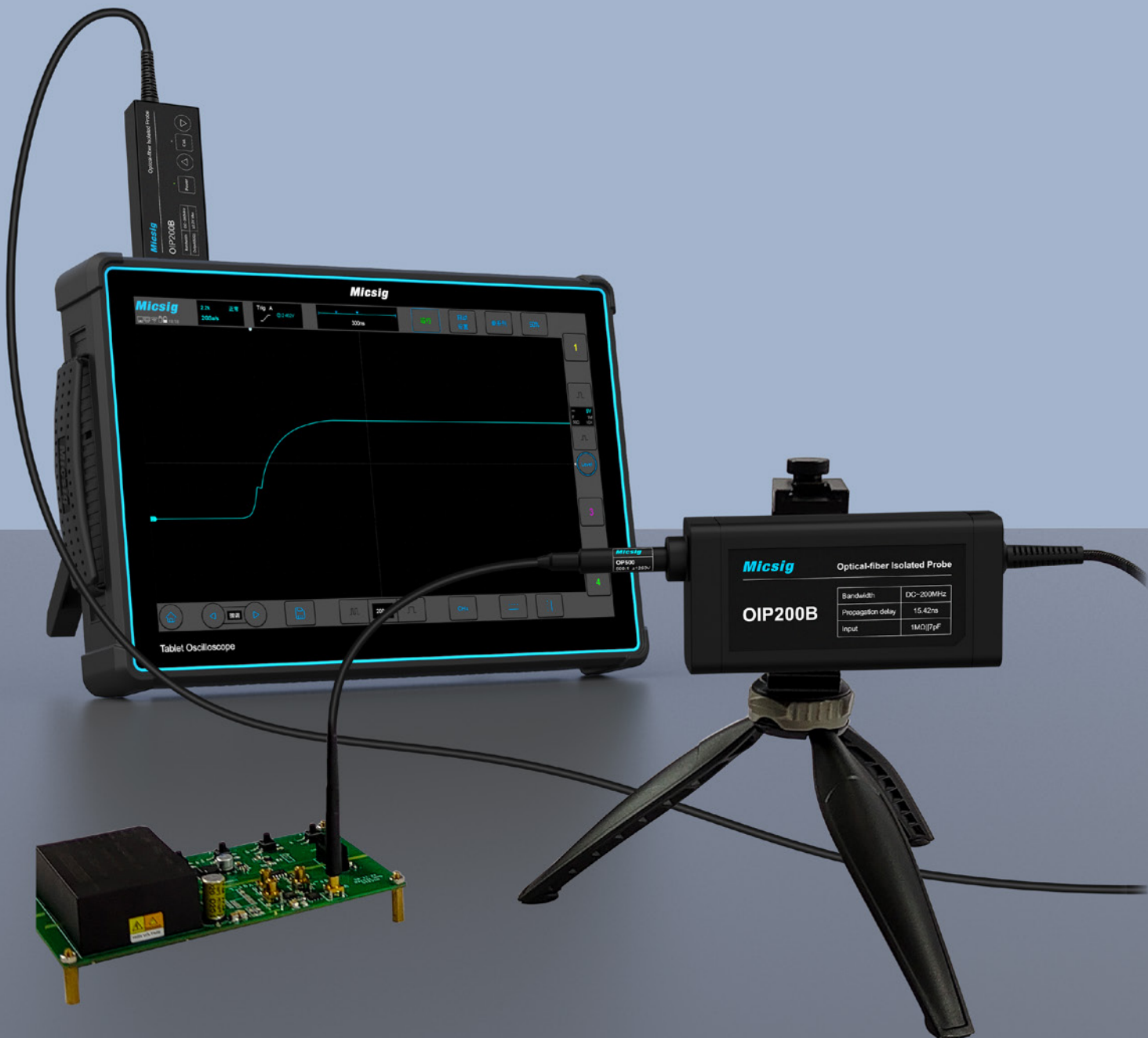


# OIP Series Optical-fiber Isolated Probe Unveil Real Signal You've Never Seen

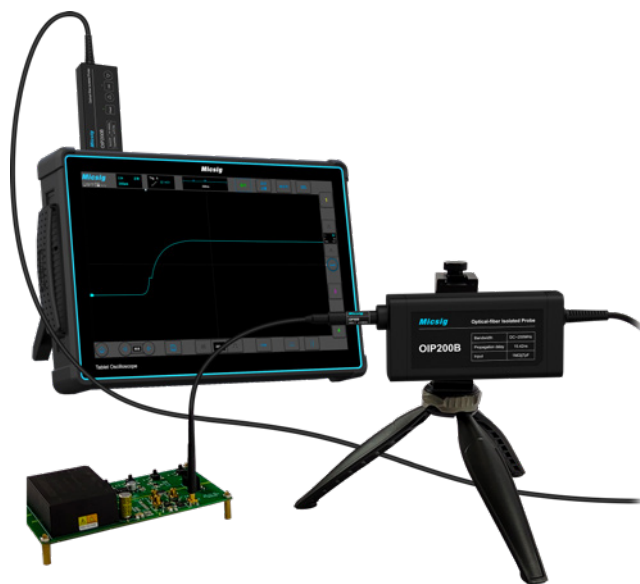
With Micsig's exclusive SigOFIT™ optical isolation technology, the OIP has extremely high common-mode rejection ratio and isolation voltage, shows the true signal at its full bandwidth. It's the ultimate referee of signal fidelity measured by other voltage probes.



## Applications:

When there are doubts about the accuracy and authenticity of the measured results of other voltage probes, the OIP can be used as the final judgment basis.

- Design of motor drive, power converter, electronic ballast
- Design & analysis of GaN, SiC, IGBT Half/Full bridge devices
- Design of inverter, UPS and switching power supply
- Safety test for high voltage, high bandwidth applications
- Power device evaluation
- Current shunt measurements
- EMI & ESD troubleshooting
- Floating measurements



## Key Features:



■ Differential Probe    ■ OIP probe

### Present True Signal

- OIP probes deliver highest CMRR and isolation voltage performance, with 1.41mVrms low noise, can get 1% measurement accuracy. It presents best signal fidelity within its bandwidth range, becomes the ultimate referee of signal fidelity measured by other voltage probes.

### Best Probe for Third-Gen Semiconductor

- Device like SiC and GaN can switch high voltages in a few nanoseconds, contains high-energy high-frequency harmonics. Even at the highest bandwidth, the OIP probes still have nearly 100dB CMRR, perfectly suppress the oscillation caused by high-frequency common-mode noise, no redundant components, it's the best choice for third-generation semiconductor test and measurement.

### Safe to Test GaN

- The test leads of OIP probes are short and with coaxial cable transmission, has less than 3pF input capacitance, very safe to test GaN.

\* When the working parameters of the device are already in the critical state of explosive, there will be nearly 3pF more capacitance added when connected to the DUT, safety is not guaranteed.

### Wide Measurement Range

- Unlike traditional differential probes can only test high-voltage signals, the OIP probes can be used with different attenuator tips to test differential mode signals from  $\pm 2.5V$  to  $\pm 2500V$ , achieving full-range output and very high signal-to-noise ratio.



OP10 / OP20 / OP500 / OP1000

### Compact & Simple

- Smaller size than traditional differential probes, more accurate probe tips, makes it much more easier and flexible to use.

### Efficient & Affordable

- Fastest response, can be tested immediately after power-on, no need to wait for warm-up, AutoZero in less than 1 second, ensures accurate signal output in real time.

## Specifications:

Model	OIP100B	OIP200B	OIP500B (to be released)	OIP1000B (to be released)
Bandwidth	100MHz	200MHz	500MHz	1GHz
Rise Time	≤3.5ns	≤1.75ns	≤ 700ps	≤ 350ps
Output Voltage	±2.5V		±1V	
Propagation Delay	15.42ns (2m cable length)			
Power Supply	USB Type-C; DC: 5V			
DC Gain Accuracy	1%			
Noise	<1.41mVrms			
Common Mode Voltage Range	60kVpk			
Battery Runtime	8 hours			
Cable Length	2m (Std.) / 10m (Opt.) (customizable)			

### Attenuator Ratio, Input Impedance

Probe Tip	Attenuation Ratio	Input Impedance
SMA Input	1X	1MΩ    10pF
OP10 Input	10X	4.47MΩ    3.0pF
OP20 Input	20X	4.23MΩ    2.8pF
OP500 Input	500X	12.27MΩ    2.6pF
OP1000 Input	1000X	30.63MΩ    2.6pF

### Common Mode Rejection Ratio (CMRR)

Probe Tip	DC	1MHz	100MHz	200MHz	500MHz	1GHz
SMA	160dB	156dB	116dB	110dB	102dB	96dB
OP10	160dB	136dB	96dB	90dB	82dB	76dB
OP20	160dB	130dB	90dB	84dB	76dB	70dB
OP500	160dB	102dB	62dB	56dB	48dB	42dB
OP1000	160dB	96dB	56dB	50dB	42dB	36dB

## Micsig

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