

The Agilent 83480A-series digital communications analyzer and Agilent 54750A-series digitizing oscilloscopes are powerful and versatile instruments designed for use in research, development, production and evaluation testing in the telecommunication, data communication, RF/microwave and signal integrity areas. Data acquisition and measurement analysis are performed in parallel, enabling the instrument to achieve outstanding measurement throughput. The instrument provides fast, repeatable communications waveform performance analysis with automated pulse and eye diagram statistical measurements. Optical or electrical conformance tests to both user-defined and industry standard eye diagram masks or pulse templates are efficiently executed. The instrument is a modular platform which accepts up to two dual-channel electrical or optical measurement modules.

The instrument provides you with the necessary capabilities to test and measure analog and digital circuits. The instrument provides:

- Optical and electrical measurement channels (*Agilent 83480A only*)
- Optical input wavelength:
  - 750 nm to 860 nm (*Agilent 83480A, with an Agilent 83487A only*)
  - 1000 nm to 1600 nm for (*Agilent 83480A, with an Agilent 83486A*)
  - 1200 to 1600 nm for (*Agilent 83480A, with an Agilent 83485A*)
- Integrated average optical power meter (*Agilent 83480A, with any optical module*)
- Calibrated vertical watts scale (*Agilent 83480A, with any optical module*)
- Up to 50 GHz bandwidth
- TDR/TDT measurements (*Agilent 54750A only, or Agilent 83480A with Agilent 54755A option*)

*This function available with firmware revision A.02.00 and above.*

# Agilent 83480A

## The Instrument at a Glance

- Standard masks and templates, (*Agilent 83480A only*) including:

Optical Masks	Electrical Masks
STM0/OC1	STS1 Eye
STM1/OC3	STS1 Pulse
OC12	STS3 Eye
OC24	STS3 Pulse 0
STM16/OC48	STS3 Pulse 1
FC133	DS1
FC266	DS1C
FC531	DS2
FC1063	DS3
FDDI	PDH 2.048 Mb
100BASE-FX	PDH 8.448 Mb
GIGABIT ETHERNET	PDH 34.4 Mb
	PDH 139 Mb 0
	PDH 139 Mb 1

- Automatic mask and template scaling, positioning, and testing
- Statistical waveform analysis
- FFT

## Ordering Information

### Supplied accessories

- Power cord for country of destination
- *Agilent 83480A, 54750A Quick Start Guide*
- *Agilent 83480A, 54750A User's Guide*
- *Agilent 83480A, 54750A Programmer's Quick Reference*
- *Agilent 83480A, 54750A Programmer's Guide*
- 9300-1484 ESD kit
- One year warranty

- Option 001    *Agilent 83480A only.* Agilent Eyeline Mode software. Loads downloadable eyeline analysis program directly to the internal disk drive. Enables Eyeline Mode operation with an Agilent 71603B, Agilent 71612A (Agilent 70843A) error performance analyzer or Agilent 71604B pattern generator.
- Option 100    Provides direct triggering on 12 GHz signals. An external gating signal can be used to further extend the triggering capabilities.
- Option 908    Rackmount kit, without handles, Agilent p/n 54710-68704
- Option 909    Rackmount kit, for instruments with handles, Agilent p/n 54710-68705
- Option 0BW    Service guide
- Option 0B1    Additional set of user documentation
- Option 0B0    Deletes the user documentation
- Option UK6    Measured performance data

### Optional accessories

- Agilent 10086A ECL terminator
- Agilent 11898A extender module
- Agilent 54006A 6 GHz divider probe
- Agilent 54008A 22 ns delay line
- Agilent 54118A 500 MHz to 18 GHz trigger
- Agilent 54753A TDR plug-in module
- Agilent 54754A TDR plug-in module
- Agilent 54755A TDR firmware kit (for use with the Agilent 83480A)

# Agilent 83480A

The Instrument at a Glance

## **Ordering Information**

Agilent 83480K communications firmware kit (for use with the Agilent 54750A)  
Agilent 83482A 40 GHz optical/electrical plug-in module  
Agilent 83483A, 54751A electrical plug-in module  
Agilent 83484A, 54752A 50 GHz electrical plug-in module  
Agilent 83485A optical/electrical plug-in module  
Agilent 83485B high speed optical/electrical plug-in module  
Agilent 83486A 1300-1500 nm multimode optical/electrical plug-in module  
Agilent 83487A 850 nm multimode optical/electrical plug-in module  
Blank, one (1) slot filler plug-in, Agilent part number 54700-68702 or  
Agilent 54700B

### **Connection devices**

SMA (f-f) adapter, Agilent part number 1250-1158  
APC 3.5 (f-f) adapter, Agilent part number 1250-1749