

VIAVI

VIAVI Solutions



Brochure

The CellAdvisor™ Portfolio

Approved by major mobile operators

The VIAVI Solutions™ CellAdvisor portfolio is optimal for installing and maintaining cell sites. It contains all the features and capabilities required to perform field testing at sites using all wireless technologies from 2G to 4G.

CellAdvisor offers a simple, easy-to-use interface with a rich set of analytical capabilities to ensure cell site installation, maintenance, and optimization are done correctly and efficiently, the first time, every time. From validating coax fronthaul, fiber inspection, and spectrum clearance to analyzing interference in fiber links, CellAdvisor does it all.



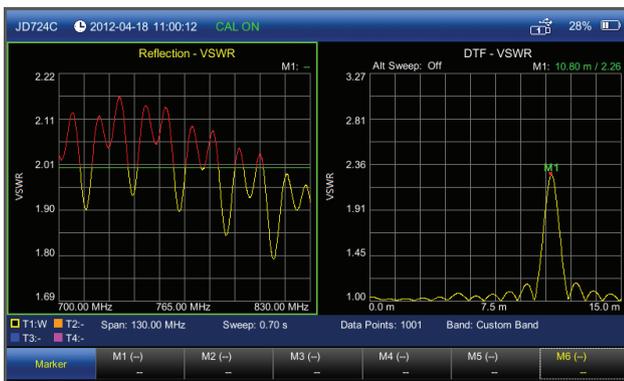
Cell Site Installation — JD720C Series

Proper cell site construction and installation is critical to avoid network commissioning issues, and it must be done in a timely manner to satisfy aggressive deployment plans.

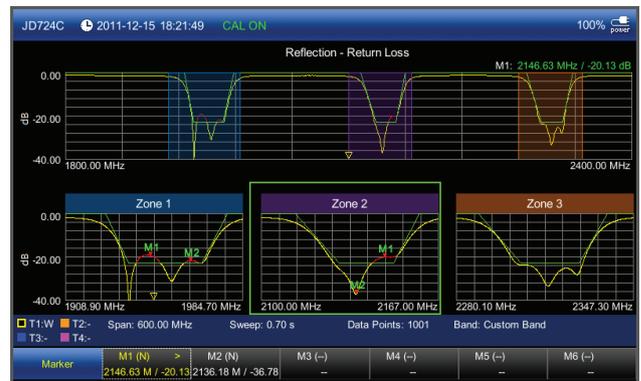
CellAdvisor JD720C Series cable and antenna analyzers conduct installations faster, simpler, and smarter, thanks to its comprehensive testing capabilities, complete measurement functions.

Key Features

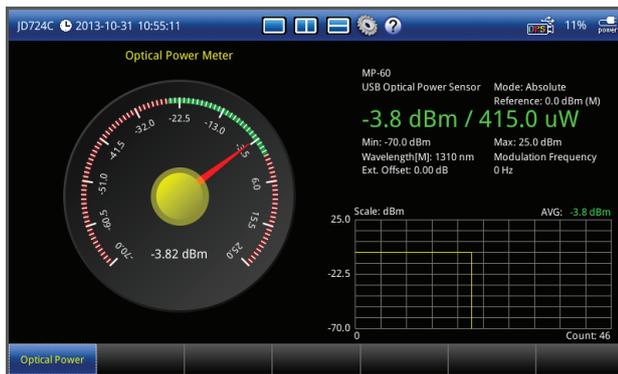
- Coaxial reflection tests
- RF-device insertion gain/loss
- Fiber inspection
- Bluetooth And WiFi connectivity
- Web-based remote control
- Includes optical power meter



Return loss and distance to fault



Reflection test with zoom zones



Optical power meter



Fiber inspection



Cell Site Installation	JD723C	JD724C	JD725C	JD726C
Frequency range	100 MHz to 2.7 GHz	5 MHz to 4 GHz	5 MHz to 4 GHz	5 MHz to 6 GHz
Coaxial reflections RL, VSWR, DTF, CL	■	■	■	■
Fiber inspection with P5000i	■	■	■	■
RF power meter with power sensors	■	■	■	■
Optical power meter with optical sensors	■	■	■	■
Insertion gain (amplifiers)	Not available	Not available	■	■
Insertion loss or isolation	Not available	Not available	■	■
RF signal generator (CW)	Not available	Not available	-30 dBm to +10 dBm	-30 dBm to +10 dBm
Ethernet, Bluetooth, WiFi connectivity	■	■	■	■
StrataSync cloud service	Not available	Not available	Not available	Not available
Web-based remote control	■	■	■	■

Interference Analysis — JD748B/JD788B

Interference analysis is a fundamental testing procedure to monitor the spectrum's environment. An effective spectrum analysis ensures wireless service coverage and identifies any interfering signals that may degrade the intended service.

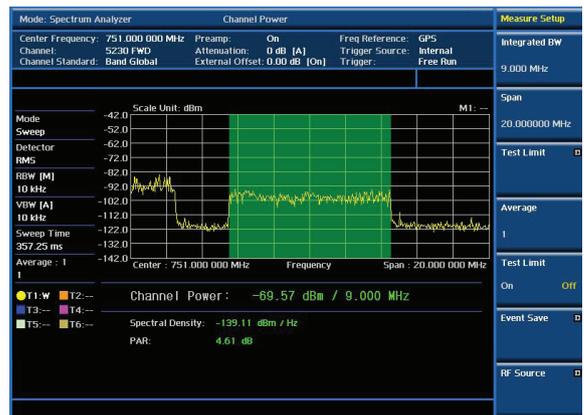
Modern cell sites have a distributed architecture where the baseband unit connects via fiber to the radio element in the top of the tower, not providing RF monitoring. RFoFiber™ provides RF visibility on fiber links with CPRI or OBSAI protocols for interference analysis purposes.

Key Features

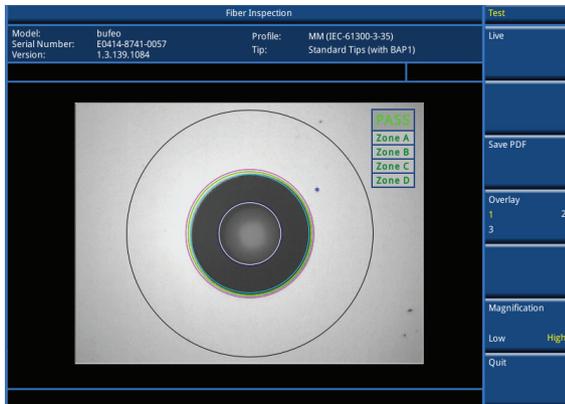
- Spectrum analysis
- Interference analysis
- Fiber inspection
- RFoFiber technology
- Bluetooth and WiFi connectivity
- Web-based remote control
- Includes optical power meter



Spectrum analysis with timed traces



RF conformance tests



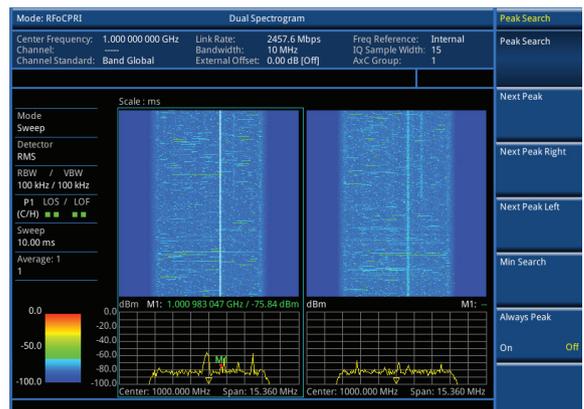
Fiber inspection



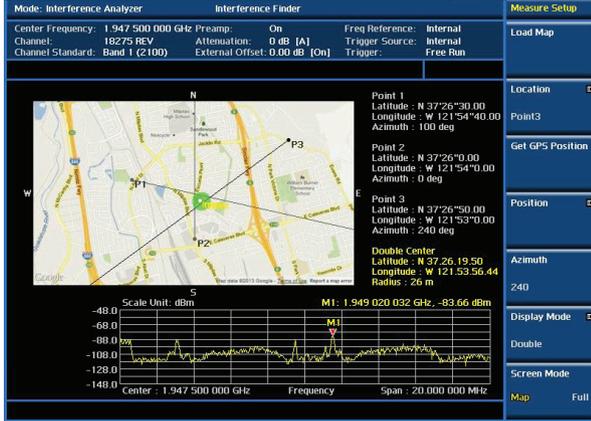
RfocFiber layer 2 measurements



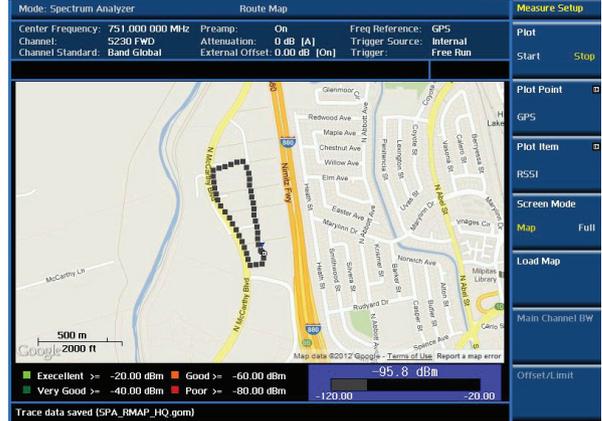
Spectrum analysis with timed traces



RF conformance tests



Fiber inspection



RFoFiber layer 2 measurements



Interference Analysis	JD748B	JD788B
Frequency range	100 KHz to 4 GHz	9 KHz to 8 GHz
Spectrum analysis	■	■
Channel scanner	■	■
Interference analysis	■	■
RF power meter with power sensors	■	■
Optical power meter with power sensors	■	■
Fiber inspection with fiber scope P5000i	■	■
RF signal generator (CW)	-80 dBm to 0 dBm	-60 dBm to +10 dBm
RFoFiber™ technology (CPRI and OBSAI)	■	■
Signal analysis 2/3/4G	■	■
Ethernet, Bluetooth, WiFi connectivity	■	■
StrataSync cloud service	Not available	Not available
Web-based remote control	■	■

Cell Site Maintenance — JD746B/JD786B

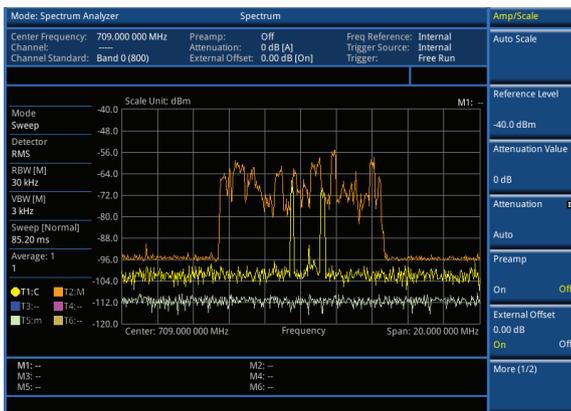
Top-quality cell site maintenance is fundamental for top-quality service assurance. Mobile operators are increasingly challenged to manage fragmented spectrum making, ensuring this valuable resource is suitable for service without any pollution or interference.

In addition, cell sites must properly transmit radio signals with no reflections or intermodulation products that may limit coverage or interfere with mobile signal transmissions.

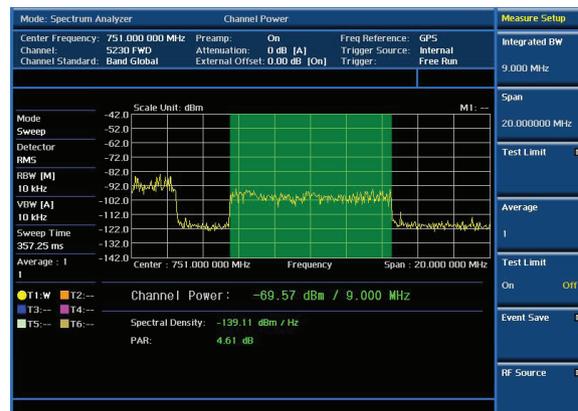
Maintenance practices cover all different cell site types, including macrocell, DAS, and small cell, with coax and fiber fronthaul where RF and fiber verification is required. Proper maintenance also requires conducting RF over fiber (RToFiber) analysis in modern cell sites with fiber links (CPRI or OBSAI).

Key Features

- Spectrum analysis
- Interference analysis
- Coaxial reflection tests
- RF-device insertion gain/loss
- Fiber inspection
- RToFiber technology
- Bluetooth and WiFi connectivity
- Web-based remote control
- Includes optical power meter



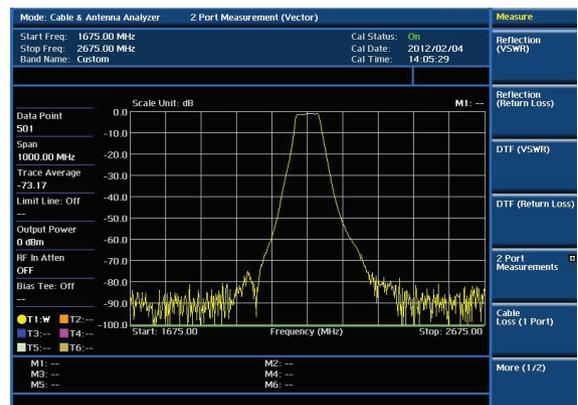
Spectrum analysis with timed traces



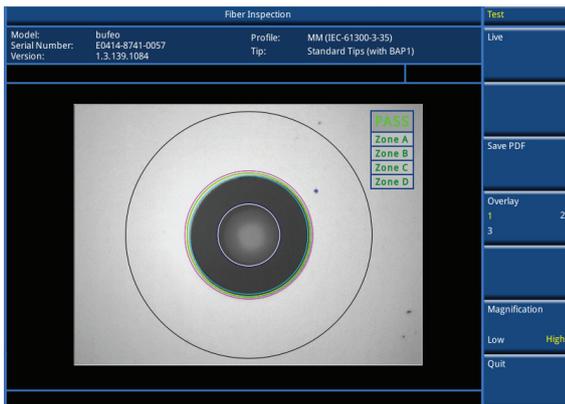
RF conformance tests



Dual test with reflection and DTF



Insertion loss



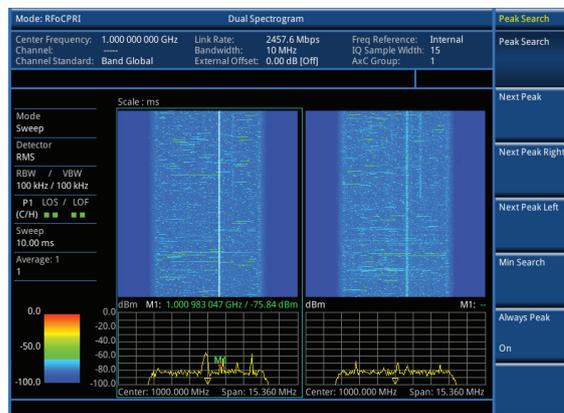
Fiber inspection



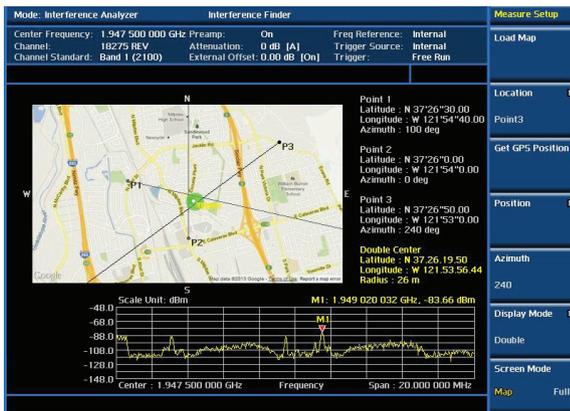
RfFiber layer 2 measurements



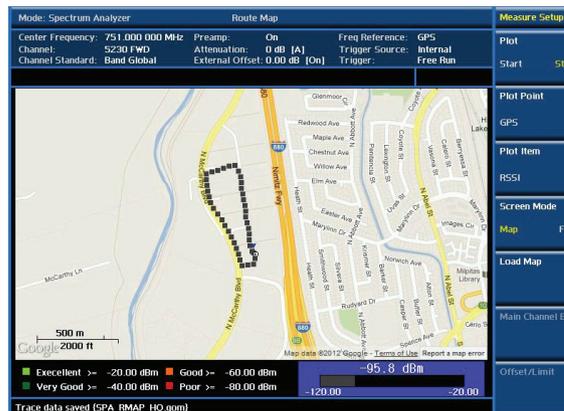
Spectrum analysis with timed traces



RF conformance tests



Interference finder



Cell coverage (route map)



Cell Site Maintenance	JD746B	JD786B
Frequency range	100 KHz to 4 GHz	9 KHz to 8 GHz
Spectrum analysis	■	■
Channel scanner	■	■
Interference analysis	■	■
Coaxial reflections RL, VSWR, DTF, CL	■	■
Insertion loss/gain	■	■
Signal generator (CW)	■	■
RF power meter with power sensors	■	■
Optical power meter with power sensors	■	■
Fiber inspection with fiber scope P5000i	■	■
RF signal generator (CW)	-80 dBm to 0 dBm	-60 dBm to +10 dBm
RFoFiber technology (CPRI and OBSAI)	■	■
Ethernet, Bluetooth, WiFi connectivity	■	■
StrataSync cloud service	Not available	Not available
Web-based remote control	■	■

Cell Site Optimization — JD745B/JD785B

Cell site maintenance is fundamental for service assurance. Mobile operators have an increasing challenge to manage fragmented spectrum making sure this valuable resource is suitable for service without any pollution or interference. And the cell site is properly transmitting the radio signals, with no reflections that will limit coverage, as well as possible intermodulation products are not interfering with mobile's transmission.

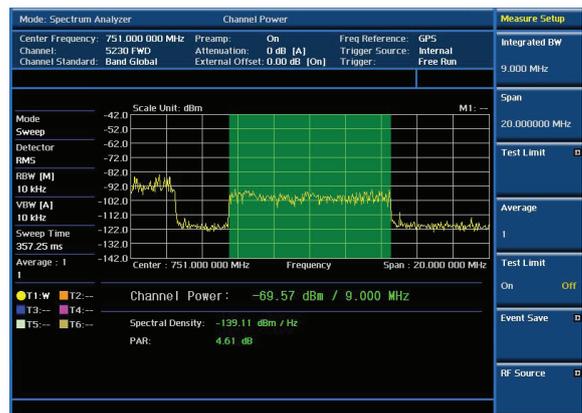
Cell sites must also be optimized to achieve bandwidth capacity where operators must ensure signal performance (modulation quality) of coexisting wireless technologies, from legacy GSM/GPRS and CDMA/EVDO to WCDMA/HSDPA and the new LTE/LTE-A.

Key Features

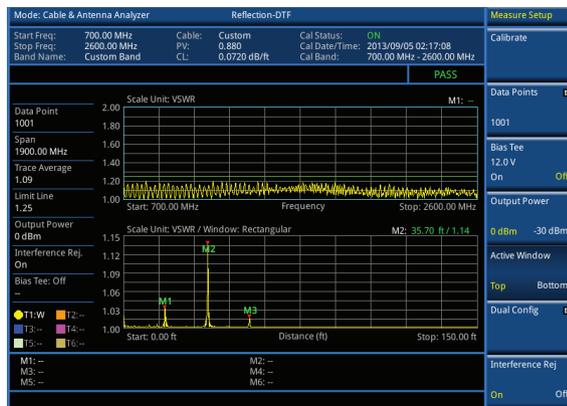
- Spectrum analysis
- Interference analysis
- Coaxial reflection tests
- RF-device insertion gain/loss
- Fiber inspection
- RFoFiber technology
- Signal analysis 2/3/4G
- Bluetooth and WiFi connectivity
- Web-based remote control
- Includes optical power meter



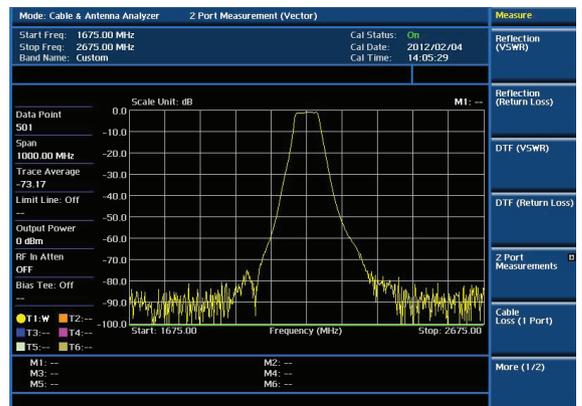
Spectrum analysis with timed traces



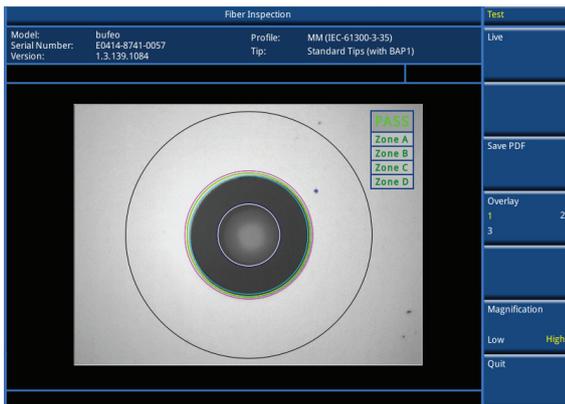
RF conformance tests



Dual test with reflection and DTF



Insertion loss



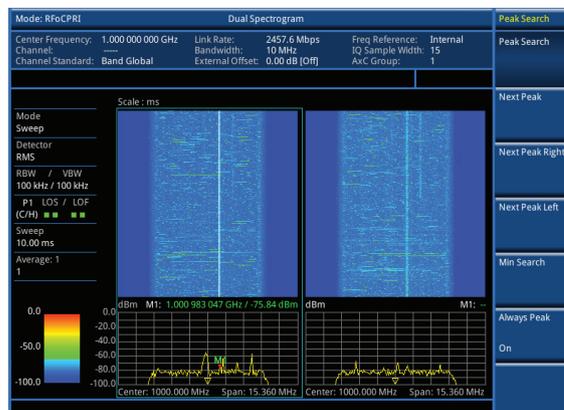
Fiber inspection



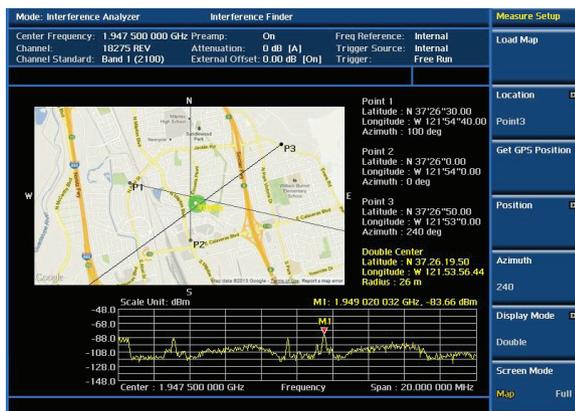
RfocPRI layer 2 measurements



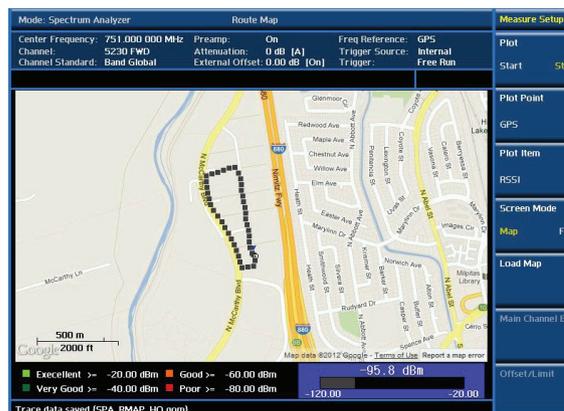
Spectrum analysis with timed traces



RF conformance tests



Interference finder



Cell coverage (route map)



Cell Site Optimization	JD745B	JD785B
Frequency range	100 KHz to 4 GHz	9 KHz to 8 GHz
Spectrum analysis	■	■
Channel scanner	■	■
Interference analysis	■	■
Coaxial reflections RL, VSWR, DTF, CL	■	■
Insertion loss/gain	■	■
Signal generator (CW)	■	■
RF power meter with power sensors	■	■
Optical power meter with power sensors	■	■
Fiber inspection with fiber scope P5000i	■	■
RF signal generator (CW)	-80 dBm to 0 dBm	-60 dBm to +10 dBm
RFoFiber technology (CPRI and OBSAI)	■	■
Signal analysis 2/3/4G	■	■
Ethernet, Bluetooth, WiFi connectivity	■	■
StrataSync™ cloud service	Not available	Not available
Web-based remote control	■	■