



CellAdvisor™

JD788B Signal Analyzer

Spectrum Analyzer (standard)

Frequency		
Frequency range	9 kHz to 8 GHz	
Internal 10 MHz Frequency Reference		
Accuracy	±0.05 ppm + aging (0 to 50°C)	
Aging	±0.5 ppm/year	
Frequency Span		
Range	0 Hz (zero span) 10 Hz to 8 GHz	
Resolution	1 Hz	
Resolution Bandwidth (RBW)		
-3 dB bandwidth	1 Hz to 3 MHz	1-3-10 sequence
Accuracy	±10% (nominal)	
Video Bandwidth (VBW)		
-3 dB bandwidth	1 Hz to 3 MHz	1-3-10 sequence
Accuracy	±10% (nominal)	
Single Sideband (SSB) Phase Noise		
Fc 1 GHz, RBW 10 kHz, VBW 1 kHz, RMS detector		
Carrier Offset		
30 kHz	-100 dBc/Hz (-102 dBc/Hz, typical)	
100 kHz	-105 dBc/Hz (-112 dBc/Hz, typical)	
1 MHz	-115 dBc/Hz (-120 dBc/Hz, typical)	
Measurement Range		
DANL to +25 dBm		
Input attenuator range	0 to 55 dB, 5 dB steps	
Maximum Input Level		
Average continuous power	+25 dBm	
DC voltage	±50 V DC	

*All specifications are subject to change without notice.

Spectrum Analyzer: 9 kHz to 8 GHz Power Meter: 10 MHz to 8 GHz Specification* Conditions

The JD788B specifications apply under these conditions:

- The instrument has been turned on for at least 15 minutes
- The instrument is operating within a valid calibration period
- Data with no tolerance are considered typical values
- Cable and antenna measurements apply after calibration to the OSL standard
- Typical and nominal values are defined as:
 - Typical: expected performance of the instrument operating under 20 to 30°C after being at this temperature for 15 minutes
 - Nominal: a general, descriptive term or parameter

Displayed Average Noise Level (DANL)	
1 Hz RBW, 1 Hz VBW, 50 Ω termination, 0 dB attenuation, RMS detector	
Preamplifier Off 10 MHz to 3 GHz >3 GHz to 5 GHz >5 GHz to 7 GHz >7 GHz to 8 GHz	-140 dBm (-145 dBm, typical) -138 dBm (-142 dBm, typical) -135 dBm (-138 dBm, typical) -132 dBm (-135 dBm, typical)
Preamplifier On 10 MHz to 3 GHz >3 GHz to 5 GHz >5 GHz to 7 GHz >7 GHz to 8 GHz	-160 dBm (-165 dBm, typical) -158 dBm (-162 dBm, typical) -155 dBm (-158 dBm, typical) -152 dBm (-155 dBm, typical)
Display Range	
Log scale and units (10 divisions displayed)	1 to 20 dB/division in 1 dB steps dBm, dBV, dBmV, dB μ V
Linear scale and units (10 divisions displayed)	V, mV, mW, W
Detectors	Normal, positive peak, sample, negative peak, RMS
Number of traces	6
Trace functions	Clear/write, maximum hold, minimum hold, capture, load view on/off
Total Absolute Amplitude Accuracy	
Preamplifier off, power level > -50 dBm, auto-coupled	
1 MHz to 8 GHz	± 1.3 dB (± 0.5 dB typical) Add ± 1.0 dB
	20 to 30°C -10 to 55°C after 60-minute warm up
Reference Level	
Setting range	-120 to +100 dBm
Setting Resolution Log scale Linear scale	0.1 dB 1% of reference level
Markers	
Marker types	Normal, delta, delta pair, noise, frequency count marker
Number of markers	6
Marker functions	Peak, next peak, peak left, peak right, minimum search marker to center/start/stop
RF Input VSWR	
1 MHz to 8 GHz	1.5:1 (typical) Atten >20 dB
Second Harmonic Distortion	
Mixer level	-25 dBm
50 MHz to 2.6 GHz	< -65 dBc (typical)
>2.6 GHz to 8 GHz	< -70 dBc (typical)

Third-Order Inter-Modulation (third-order intercept: TOI)		
200 MHz to 3 GHz	+10 dBm (typical)	
>3 GHz to 8 GHz	+12 dBm (typical)	
Spurious		
Inherent residual response		
Input terminated, 0 dB attenuation, preamplifier off, RBW at 10 kHz, Sweep mode	-90 dBm (nominal)	
Exceptions	-85 dBm at 164.1 MHz, 2.57264, 3.2, and 4.5 GHz -80 dBm at 4.8/7.8 GHz -75 dBm at 85.6 MHz and 428 MHz -70 dBm at 256.8 MHz	
Input-related spurious	< -70 dBc (nominal)	
Dynamic Range		
2/3 (TOI-DANL) in 1 Hz RBW	>104 dB	at 2 GHz
Sweep Time		
Range	0.4 ms to 1000 s	
	24 μ s to 200 s	Span = 0 Hz (zero span)
Accuracy	$\pm 2\%$	Span = 0 Hz (zero span)
Mode	Continuous, single	
Gated Sweep		
Trigger source	External, video, and GPS	
Gate length	1 μ s to 100 ms	
Gate delay	0 to 100 ms	
Trigger		
Trigger source	Free run, video, external	
Trigger Delay Range Resolution	0 to 200 s 6 μ s	
Measurements*		
Channel power		
Occupied bandwidth		
Spectrum emission mask		
Adjacent channel power		
Spurious emissions		
Field strength		
AM/FM audio demodulation		
Route map		
PIM detection		
Dual spectrum		

*High-power CW signal generator (Option 003) can be set up simultaneously.

RF PowerMeter(standard)

General Parameters			
Display range	-100 to +100 dBm		
Offset range	0 to 60 dB		
Resolution	0.01 dB or 0.1 x W (x = m, u, p)		
Internal RF Power Sensor			
Frequency range	10 MHz to 8 GHz		
Span	1 kHz to 100 MHz		
Dynamic range	-120 to +25 dBm		
Maximum power	+25 dBm		
Accuracy	Same as spectrum analyzer		
External RF Power Sensors			
Directional	JD731B	JD733A	
Frequency range	300 MHz to 3.8 GHz	150 MHz to 3.5 GHz	
Dynamic range	0.15 to 150 W (average) 4 to 400 W (peak)	0.1 to 50 W (average) 0.1 to 50 W (peak)	
Connector type	Type-N female on both ends		
Measurement type	Forward/reverse average power, forward peak power, VSWR		
Accuracy	$\pm(4\% \text{ of reading} + 0.05 \text{ W})^{1,2}$		
Terminating	JD732B	JD734B	JD736B
Frequency range	20 MHz to 3.8 GHz		
Dynamic range	-30 to +20 dBm		
Connector type	Type-N male		
Measurement type	Average	Peak	Average and peak
Accuracy	$\pm 7\%^1$		

Optical Power Meter (standard)

Optical Power Meter		
Display range	-100 to +100 dBm	
Offset range	0 to 60 dB	
Resolution	0.01 dB or 0.1 mW	
External Optical Power Sensors		
	MP-60A	MP-80A
Wavelength range	780 to 1650 nm	
Max permitted input level	+10 dBm	+23 dBm
Connector input	Universal 2.5 and 1.25 mm	
Accuracy	$\pm 5\%$	

1. CW condition at 25°C $\pm 10^\circ\text{C}$

2. Forward power

High-Power CW Signal Generator (Option 003)

Frequency	
Frequency range	10 MHz to 5500 MHz
Frequency reference	$< \pm 1$ ppm maximum
Frequency resolution	10 kHz
Output Power	
Range	10 MHz to 3.5 GHz, -60 to +10 dBm 3.5 GHz to 5.5 GHz, -60 to +5 dBm
Step	1 dB
Accuracy	± 1.5 dB (20 to 30°C)

GPS Receiver and Antenna (Option 010)

GPS Indicator		
Latitude, longitude, altitude		
High-Frequency Accuracy		
Spectrum, interference, and signal analyzer		
GPS lock	± 25 ppb	
Hold over (for 3 days)	± 50 ppb (0 to 50°C)	15 minutes after satellite locked
Connector	SMA, female	

Interference Analyzer (Option 011)

Measurements	
Spectrum analyzer	Sound indicator, AM/FM audio demodulation, interference ID, spectrum recorder
Spectrogram	Collect up to 72 hours of data
RSSI	Collect up to 72 hours of data
Interference finder	
Spectrum replayer	
Dual spectrogram	

Channel Scanner (Option 012)

Frequency Range	
1 MHz to 8 GHz	
Measurement Range	
-110 to +25 dBm	
Measurements	
Channel scanner	1 to 20 channels
Frequency scanner	1 to 20 frequencies
Custom scanner	1 to 20 channels or frequencies

GSM/GPRS/EDGE Signal Analyzer (Options 022 and 042)

General Parameters		
Frequency range	450 MHz to 500 MHz 820 MHz to 965 MHz 1.705 GHz to 1.995 GHz	
Input signal range	-40 to +25 dBm	
Burst power	±1.0 dB	
Frequency error	±10 Hz + ref freq accuracy	99% confidence level
GMSK modulation quality		
Phase RMS Accuracy	±1.0 degrees	(0 < Phase RMS < 8)
Residual error	0.7 degrees (typical)	
Phase peak accuracy	±2.0 degrees	(0 < Phase peak < 30)
8 PSK modulation quality		
EVM Accuracy	±1.5%	(2% < EVM < 8%)
Residual error	2.5%	
RF power vs. time	±0.25 symbol	

Measurements

Option 022

Channel Power	Peak level at defined range	TSC (Slot 0 to 7)	C/I*	PvsT – Mask	
Channel power	Spurious Emissions	Constellation	EVM RMS*	Frame average power	
Spectral density	Peak frequency at defined range	Burst power	EVM Peak*	Frequency error	
Peak to average power	Peak level at defined range	Modulation type	EVM 95th*	Phase error RMS	
Occupied Bandwidth	Power vs. Time (slot)	Frequency error	Auto Measure	Phase error peak	
Occupied bandwidth	Burst power	Phase error RMS	Channel power	EVM RMS*	
Integrated power	Max/min point	Phase error peak	Occupied bandwidth	EVM Peak*	
Occupied power	Power vs. Time (frame)	I/Q origin offset*	Spectrum emission mask	I/Q origin offset	
Spectrum Emission Mask	Frame average power	TSC	Spurious emission mask	C/I*	
Reference power	Burst power (Slot 0 to 7)	BSIC	Burst power		

Option 042

Channel/Frequency Scanner	BSIC (NCC, BCC)	SNR, delay	Frame average power	Modulation type	
Channels or frequencies	Multipath Profile	Modulation Analyzer	BSIC, frame no. and time		
Absolute power	(10 strongest)	Frame avg power trend	C/I, frequency error		
Group (traffic, control)	Frame average power	C/I trend	Burst power		

Longitude, latitude and satellite in all screens

* Measurements performed for 8PSK modulation signals (EDGE) only.

WCDMA/HSPA + Signal Analyzer (Options 023 and 043)

General Parameters						
Frequency range	Band 1 to 14, 19 to 22, 25, 26					
Input signal range	-40 to +25 dBm					
RF channel power accuracy	±1.0 dB, ±0.7 dB (typical)					
Occupied bandwidth accuracy	±100 kHz					
Adjacent channel leakage ratio (ACLR)	< -56 dB, ±0.7 dB at 5 MHz offset < -58 dB, ±0.8 dB at 10 MHz offset					
WCDMA modulation	QPSK					
HSPA+ modulations	QPSK, 16 QAM, 64 QAM					
Frequency error	±10 Hz + ref. freq accuracy	99% confidence level				
EVM accuracy	±2.0%	2% ≤ EVM ≤ 20%				
Residual EVM	2.5% (typical)					
Code domain power	±0.5 dB relative power	Code channel power > -25 dB				
	±1.5 dB absolute power	Code channel power > -25 dB				
CPICH power accuracy	±0.8 dB (typical)					
Measurements						
Option 023						
Channel Power	ACLR	Constellation	Max, avg active power	Codogram	Auto measure	
Channel power	Reference power	CPICH power	Max, avg inactive power	Code utilization	Channel power	
Spectral density	Abs power at defined range	Rho, EVM	Scramble code	RCSI	Occupied bandwidth	
Peak to average power		Peak CDE	Relative Code Domain Error		CPICH, P-CCPCH, S-CCPCH, PICH, P-SCH, S-SCH	Spectrum emission mask
Occupied Bandwidth	Rel power at defined range	Frequency error	Abs/Rel code power	CDP table	ACLR	
Occupied bandwidth	Time offset	Carrier feed-through			Reference power	Multi-ACLR
Integrated power	Multi-ACLR	Carrier feed-through	Code error	Reference power	Spurious emission mask	
Occupied power	Lowest reference power	Scramble code	Individual code EVM, RCDE, and its constellation	Code utilization	Frequency error	
Spectrum Emission Mask	Highest reference power	Code Domain Power		Code, spreading factor	EVM	
Reference power	Abs power at defined range	Abs/Rel code power	Channel power	Allocation (channel type)	Peak CDE	
Peak level at defined range		Individual code EVM and its constellation		EVM, modulation type	Carrier feed-through	
	Rel power at defined range	Channel power	Power bar graph (Abs/Rel/Delta power)	Relative, absolute power	CPICH absolute power	
	Spurious Emissions	Power bar graph (Abs/Rel/Delta power) CPICH, P-CCPCH, S-CCPCH PICH, P-SCH, S-SCH	CPICH, P-CCPCH, S-CCPCH, PICH, P-SCH, S-SCH		CPICH relative power	
	Peak frequency at defined range		Avg RCDE QPSK, 16 QAM, 64 QAM			Max inactive power
	Peak level at defined range					Scramble code
					Power Statistics CCDF	
Option 043						
Channel Scanner (up to 6)	Scramble Scanner (up to 6)	Multipath Profile	Code Domain Power	Max, avg active power	Amplifier capacity	
		Channel, multipath power	Abs/Rel code power	Max, avg inactive power	Peak amplifier capacity	
Frequencies or channels	Channel power	Ec/Io, delay	Individual code EVM	Frequency error	Average amplifier capacity	
Channel power, scramble code, CPICH power, Ec/Io	CPICH dominance		Channel power	Time offset, Rho	Capacity	
	Scramble code		Scramble code	Carrier feed-through	Code, peak utilization	
	Ec/Io, CPICH power, delay		CPICH, P-CCPCH, S-CCPCH, PICH, P-SCH, S-SCH	(Composite) EVM	Average utilization	
				CPICH EVM, P-CCPCH EVM	Route Map	
					CPICH power, Ec/Io	

Longitude, latitude, and satellite in all screens

cdmaOne/cdma2000® Signal Analyzer (Options 020 and 040)

General Parameters					
Frequency range	Band 0 to 10				
Input signal level	-40 to +25 dBm				
RF channel power accuracy	±1.0 dB (typical)				
CDMA compatibility	cdmaOne and cdma2000				
Frequency error	±10 Hz + ref freq accuracy	99% confidence level			
Rho accuracy	±0.005	0.9 < Rho < 1.0			
Residual Rho	>0.995 (typical)				
PN offset	1 x 64 chips				
Code domain power	±0.5 dB relative power	Code channel power >-25 dB			
	±1.5 dB absolute power	Code channel power >-25 dB			
Pilot power accuracy	±1.0 dB (typical)				
Time offset	±1.0 μs, ±0.5 μs (typical)	External trigger			
Measurements					
Option 020					
Channel Power	ACPR	Peak level at defined range	Channel power	Reference power	Rho
Channel power	Reference power	Constellation	Power bar graph (Abs/Rel)	Code utilization	Frequency error
Spectral density	Abs power at defined range	Pilot power	Pilot, Paging, Sync, Q-Paging	Code, spreading factor	Time offset
Peak to average power	Rel power at defined range	Rho	Max, avg active power	Allocation (channel type)	Carrier feed-through
Occupied Bandwidth	Multi-ACPR	EVM	Max, avg inactive power	Relative, absolute power	Pilot power
Occupied bandwidth	Lowest reference power	Frequency error	PN offset	Auto Measure	Max inactive power
Integrated power	Highest reference power	Time offset	Codogram	Channel power	PN offset
Occupied power	Abs power at defined range	Carrier feed-through	Code utilization	Occupied bandwidth	Power Statistics CCDF
Spectrum Emission Mask	Rel power at defined range	PN offset	RCSI	Spectrum emission mask	
Reference power	Spurious Emissions	Code Domain Power	Pilot, Paging, Sync, Q-Paging	ACPR	
Peak level at defined range	Peak freq at defined range	Abs/Rel code power	CDP Table	Multi-ACPR	
Option 040					
Channel Scanner (up to 6)	Ec/Io, pilot power, delay	PN offset	Peak amplifier capacity		
Frequencies or channels	Multipath Profile	Pilot, Paging, Sync, Q-Paging power	Average amplifier capacity		
Channel power, PN offset	Channel power	Max, avg active power	Code utilization		
Pilot power, Ec/Io	Multipath power	Max, avg inactive power	Peak utilization		
PN Scanner (up to 6)	Ec/Io, delay	Frequency error	Average utilization		
Channel power	Code Domain Power	Time offset, Rho, EVM	Route Map		
Pilot dominance	Abs/Rel code power	Carrier feed-through	Pilot power		
PN offset	Channel power	Amplifier capacity	Ec/Io		

Longitude, latitude, and satellite in all screens

EV-DO Signal Analyzer (Options 021 and 041)

General Parameters						
Frequency range	Band 0 to 10					
Input signal level	-40 to +25 dBm					
RF channel power accuracy	±1.0 dB (typical)					
EV-DO compatibility	Rev 0, Rev A and Rev B					
Frequency error	±10 Hz + ref freq accuracy	99% confidence level				
Rho accuracy	±0.005	0.9 < Rho < 1.0				
Residual Rho	>0.995 (typical)					
PN offset	1 x 64 chips					
Code domain power	±0.5 dB relative power	Code channel power >-25 dB				
	±1.5 dB absolute power	Code channel power >-25 dB				
Pilot power accuracy	±1.0 dB (typical)					
Time offset	±1.0 μs, ±0.5 μs (typical)	External trigger				
Measurements						
Option 021						
Channel Power	ACPR	Power vs. Time (idle and active slot)	Constellation (pilot, MAC 64/128, and data)	Code Domain Power (data)	Auto Measure	
Channel power	Reference power				Channel power	
Spectral density Peak to average power	Abs power at defined range	Slot average power	Channel power	Data channel power	Occupied bandwidth	
		On/off ratio	Rho, EVM, peak CDE	Slot average power	Spectrum emission mask	
Occupied Bandwidth	Rel power at defined range	Idle activity	Frequency error	Max, avg active power	ACPR	
		Pilot, MAC, data power	Time offset	Max, avg inactive power	Multi-ACPR	
Integrated power	Multi-ACPR	Constellation (composite 64/128)	Carrier feed-through	PN offset	Pilot, MAC, data power	
Occupied power			Lowest reference power	PN offset	MAC Codogram	On/off ratio
Spectrum Emission Mask	Highest reference power	Channel power	Modulation type*	Code utilization	PvsT mask (idle slot) or PvsT mask (active slot)	
		Reference power	Rho, EVM, Peak CDE	Code Domain Power (pilot and MAC 64/128)	RCSI	Frequency error
Peak level at defined range		Frequency error	Slot, pilot, MAC, data			
	Rel power at defined range	Time offset	Pilot/MAC channel power	MAC CDP Table	Time offset	
		Carrier feed-through	Slot average power	Reference power	Carrier feed-through	
	Spurious Emissions	PN offset	Max active I/Q power	Code utilization	Pilot, MAC, data Rho	
		Peak frequency at defined range	Pilot, MAC, data power	Avg active I/Q power	Code, spreading factor	Max inactive I/Q power
			Pilot, MAC, data EVM	Max inactive I/Q power	Allocation (channel type)	PN offset
	Peak level at defined range		Avg inactive I/Q power	Relative, absolute power	Power Statistics CCDF	
			PN offset			
Option 041						
Channel Scanner (up to 6)	PN Scanner (up to 6)	Multipath Profile	Code Domain Power	Frequency error	Peak utilization	
	Channel power	Channel power	Slot average power	Time offset	Average utilization	
Frequencies or channels	Pilot dominance	Multipath power	PN offset	Carrier feed-through	Route Map	
PN offset	PN offset	Ec/Io, delay	Pilot, MAC, data power	Max active I/Q power	Pilot power	
Pilot, MAC, data power	Ec/Io, pilot power, delay		Pilot, MAC, data Rho	Avg active I/Q power	Ec/Io	
			(Composite) EVM	Code utilization		

Longitude, latitude, and satellite in all screens

*Measurement is performed in Data Constellation only.

TD-SCDMA Signal Analyzer (Options 025 and 045)

General Parameters				
Frequency range	1.785 GHz to 2.22 GHz			
Input signal level	-40 to +25 dBm			
Channel power (RRC) accuracy	±1.0 dB (typical)			
Modulations	QPSK, 8 PSK, 16 QAM, 64 QAM			
Frequency error	±10 Hz + ref freq accuracy	99% confidence level		
Residual EVM (RMS)	2.0% (typical)	P-CCPCH slot and 1 channel		
Time error (Tau)	±0.2 μs (typical)	External trigger		
Spreading factor	Auto (DL, UL), 1, 2, 4, 8, 16			
Measurements				
Option 025				
Channel Power	Spurious Emissions	Timogram	Avg active code power	Multi-ACLR
Channel power	Peak frequency at defined range	Constellation	Max inactive code power	Slot power
Spectral density	Peak level at defined range	Rho	Avg inactive code power	DwPTS power
Peak to average power	Power vs. Time (slot)	EVM RMS, EVM peak	Code Error	UpPTS power
Occupied Bandwidth	Slot power	Peak CDE	Code power and error	On/off slot ratio
Occupied bandwidth	DwPTS power	Frequency error	Individual code EVM and its constellation	Frequency error
Integrated power	UpPTS power	I/Q origin offset	Data format	EVM RMS
Occupied power	On/off slot ratio	Time offset	Slot, DwPTS power	Peak CDE
Spectrum Emission Mask	Slot PAR	Midamble Power	No. of active code	Max inactive power
Reference power	DwPTS code	Slot power	Scramble code	Scramble code
Peak level at defined range	Power vs. Time (frame)	DwPTS power	Max active code power	
ACLR	Slot power (TS [0 to 6], DwPTS, UpPTS)	Midamble power (1 to 16)	Avg active code power	
Reference power	Data power left (TS [0 to 6], DwPTS, UpPTS)	Code Power	Max inactive code power	
Abs power at defined range	Midamble power (TS [0 to 6], DwPTS, UpPTS)	Abs/Rel code power	Avg inactive code power	
Rel power at defined range	Data power right (TS [0 to 6], DwPTS, UpPTS)	Individual code EVM and its constellation	Peak CDE and peak active CDE	
Multi-ACLR	Time offset (TS [0 to 6], DwPTS, UpPTS)	Data format	Auto Measure	
Lowest reference power	Power vs. Time (mask)	Slot power, DwPTS power	Channel power	
Highest reference power	Slot power	No. of active code	Occupied bandwidth	
Abs power at defined range	On/off slot ratio	Scramble code	Spectrum emission mask	
Rel power at defined range	Off power	Max active code power	ACLR	
Option 045				
Sync-DL ID Scanner (32)	Sync-DL ID vs. Tau (up to 6)	Ec/Io, Tau	DwPTS power	DwPTS Power
Scramble code group	ID, power, Ec/Io, Tau	DwPTS power	Pilot dominance	
Ec/Io, Tau	DwPTS power	Pilot dominance	EVM, frequency error	
DwPTS power	Pilot dominance	Sync-DL ID Analyzer	Ec/Io, CINR	
Pilot dominance	Sync-DL ID Multipath	DwPTS power, Ec/Io trend	Route Map	

Longitude, latitude, and satellite in all screens

Mobile WiMAX Signal Analyzer (Options 026 and 046)

General Parameters		
Frequency range	2.1 GHz to 2.7 GHz 3.4 GHz to 3.85 GHz	
Input signal level	-40 to +25 dBm	
Channel power accuracy	±1.0 dB (typical)	
Supported bandwidth	7 MHz, 8.75 MHz, and 10 MHz	
Frequency error	±10 Hz + ref freq accuracy	99% confidence level
Residual EVM (RMS)	1.5% (typical)	

Measurements

Option 026

Channel Power	Spurious Emissions	Constellation	EVM vs. Subcarrier	Auto Measure	Time offset
Channel power	Peak frequency at defined range	Channel power	RCE RMS, RCE peak	Channel power	I/Q origin offset
Spectral density		RCE RMS, RCE peak	EVM RMS, EVM peak	Occupied bandwidth	Spectral flatness
Peak to average power	Peak level at defined range	EVM RMS, EVM peak	Segment ID, cell ID	Spectrum emission mask	Frequency error
Occupied Bandwidth	Power vs. Time (frame)	Frequency error	Preamble index	Spurious emission mask	RCE RMS
Occupied bandwidth	Channel power	Time offset	EVM vs. Symbol	Preamble power	RCE peak
Integrated power	Frame average power	Segment ID, cell ID	RCE RMS, RCE peak	DL burst power	EVM RMS
Occupied power	Preamble power	Preamble index	EVM RMS, EVM peak	UL burst power	EVM peak
Spectrum Emission Mask	DL burst power	Spectral Flatness	Segment ID, cell ID	Frame average power	Power Statistics CCDF
Reference power	UL burst power	Average subcarrier power	Preamble index		
Peak level at defined range	I/Q origin offset	Subcarrier power variation			
	Time offset				
		Max, min, avg power			

Option 046

Preamble Scanner (up to 6)	Multipath Profile	Preamble Power Trend	Frame avg power	Preamble	Route Map
	Total preamble power	Preamble power trend	Relative power	Cell ID, sector ID	Preamble power
Total preamble power	Multipath power	Relative power trend	C/I	Time offset	
Preamble, relative power	Relative power, delay	Preamble power			
Cell ID, sector ID					
Time offset					

Longitude, latitude, and satellite in all screens

LTE/LTE-Advanced-FDD Signal Analyzer (Options 028/030 and 048)

General Parameters						
Frequency range	Band 1 to 14, 17 to 26					
Input signal level	-40 to +25 dBm					
Channel power accuracy	±1.0 dB (typical)					
Supported bandwidths	1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, and 20 MHz					
Frequency error	±10 Hz + ref freq accuracy	99% confidence level				
Residual EVM (RMS)	2.0% (typical)	Data EVM				
Measurements						
Option 028/030						
Channel Power	Power vs. Time (frame)	Control Channel	Data EVM RMS, peak RS EVM RMS, peak	Antenna 1 RS power and EVM	PDSCH/Data* 64 QAM EVM	
Channel power	Frame average power	Control channel summary (P-SS, S-SS, PBCH, PCFICH, PHICH, PDCCH, RS, MBSFN*)	Cell, group, sector ID	Antenna 2 RS power and EVM**	Data EVM RMS, peak	
Spectral density	Subframe power		Frame	Antenna 3 RS power and EVM**	RS, P-SS, S-SS EVM	
Peak to average power	First slot power		MBSFN*		RS, P-SS, S-SS power	
Occupied Bandwidth	Second slot power		EVM, relative or absolute power, modulation type	Frame summary table (P-SS, S-SS, PBCH, PCFICH, PHICH, PDCCH, RS, MBSFN*, PDSCH/ Data* QPSK, PDSCDH/ Data* 16 QAM, PDSCH/Data* 64 QAM)	Data Allocation Map	PBCH power
Occupied bandwidth	Cell ID, I/Q origin offset	Each control channels'	Data allocation vs frame	Subframe power		
Integrated power	Time offset			OFDM symbol power	OFDM power	
Occupied power	Constellation	I/Q diagram	Resource block power	Time error		
Spectrum Emission Mask	MBSFN*		Modulation format	Data utilization	I/Q origin offset	
Reference power	RS TX power	Frequency error	Data allocation vs subframe	Carrier Aggregation**		
Peak level at defined range	PDSCH/Data* QPSK EVM	I/Q origin offset	Resource block power	Component carriers: up to 5		
ACLR	PDSCH/Data* 16 QAM EVM	EVM RMS, EVM peak	Data utilization	Subframe power		
Reference power	PDSCH/Data* 64 QAM EVM	Subframe	OFDM symbol power	Auto Measure		
Abs power at defined range	Data EVM RMS	MBSFN*	Frequency error	Channel power		
Rel power at defined range	Data EVM peak	Subframe summary table (P-SS, S-SS, PBCH, PCFICH, PHICH, PDCCH, RS, MBSFN*, PDSCH/ Data* QPSK, PDSCH/ Data* 16 QAM, PDSCH/ Data* 64 QAM)	I/Q origin offset	Occupied bandwidth	PDSCH/Data* QPSK power and EVM	
Multi-ACLR	Time error		EVM RMS, peak	EVM RMS, peak	Spectrum emission mask	PDSCH/Data* 16 QAM power and EVM
Lowest reference power	Data Channel		Data EVM RMS, peak	Cell, group, sector ID	ACLR	
Highest reference power	MBSFN*		Time Alignment Error	Time Alignment Error	Multi-ACLR	PDSCH/Data* 64 QAM power and EVM
Abs power at defined range	Resource block power	EVM, relative or absolute power, modulation type	Time alignment error trend	Spurious emission mask	PDSCH/Data* 64 QAM power and EVM	
Rel power at defined range	I/Q diagram			Frame average power		
Spurious Emissions	RB power			Time alignment error	Cell ID	
Peak frequency at defined range	Modulation format	Subframe power	Time alignment error	Frequency error	Frequency error	
Peak level at defined range	I/Q origin offset	OFDM symbol power	RS power difference	MBSFN*	Time alignment error	
	EVM RMS, EVM peak	Frequency, time error	Antenna 0 RS power and EVM	PDSCH/Data* QPSK EVM	Antenna port	
				PDSCH/Data* 16 QAM EVM	Power Statistics CCDF	
Option 048						
Channel Scanner (up to 6)	ID Scanner (up to 6)	Multipath Profile	Control channel table (P-SS, S-SS, PBCH, PCFICH, RS 0, RS 1, RS 2**, RS 3**, MBSFN RS*)	PMCH subframe power*	Route Map	
Frequency or channels	RSRP/RSRQ dominance	Cell, group, sector ID	Absolute power	Time alignment error	RSRP	
Cell, group, sector ID	S-SS RSSI dominance	Ant 0 RS Ec/Io, delay	Relative power	Time offset	RSRQ	
Channel power	S-SS Ec/Io dominance	Ant 1 RS Ec/Io, delay	EVM RSM, phase	Datagram	RS-SINR	
RSRP/RSRQ	Cell, group, sector ID	Ant 2 RS Ec/Io**, delay**	Frequency error	Datagram	S-SS RSSI	
RS-SINR	RSRP/RSRQ	Ant 3 RS Ec/Io**, delay**		Resource block power	P-SS/S-SS Power	
Antenna port	RS-SINR/S-SS RSSI	Control Channel		Data utilization	S-SS Ec/Io	
	P-SS/S-SS Power	RS power trend				
	S-SS Ec/Io	Cell, group, sector ID				

Longitude, latitude, and satellite in all screens

*Measurement is performed when MBMS is enabled.

**Measurement is performed when option 030 is enabled. LTE/LTE-Advanced-FDD Signal Analyzer (Options 028/030)

LTE/LTE-Advanced– TDD Signal Analyzer (Options 029/031 and 049)

General Parameters					
Frequency range	Band 33 to 43				
Input signal level	-40 to +25 dBm				
Channel power accuracy	±1.0 dB (typical)				
Supported bandwidth	1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, and 20 MHz				
Frequency error	±10 Hz + ref freq accuracy	99% confidence level			
Residual EVM (RMS)	2.0% (typical)	Data EVM			
Measurements					
Option 029/031					
Channel Power	Spurious Emissions	Data EVM peak	Subframe	Antenna 3 RS power and EVM**	PDSCH/Data* 64 QAM EVM
Channel power	Peak frequency at defined range	Frequency error	MBSFN*		
Spectral density		Time error	Subframe summary table	Cell, group, sector ID	Data EVM RMS, peak
Peak to average power	Peak level at defined range	Data Channel	(P-SS, S-SS, PBCH, PCFICH, PHICH, PDCCH, RS, MBSFN*, PDSCH/Data* 16 QAM, PDSCH/Data* 64 QAM)	Data Allocation Map	RS, P-SS, S-SS EVM
Occupied Bandwidth		MBSFN*		Data allocation vs frame	RS, P-SS, S-SS power
Occupied bandwidth	Power vs. Time (frame)	Resource block power		Resource block power	PBCH power
Integrated power	Frame average power	I/Q diagram		OFDM symbol power	Subframe power
Occupied power	Subframe power	RB power		Data utilization	OFDM power
Spectrum Emission Mask	First slot power	Modulation format	EVM, relative or absolute power, modulation type	Data allocation vs subframe	Time error
Reference power	Second slot power	I/Q origin offset			I/Q origin offset
Peak level at defined range	Cell ID, I/Q origin offset	EVM RMS, EVM peak	Subframe power	Resource block power	Carrier Aggregation**
	Time offset	Control Channel	OFDM symbol power	Data utilization	Component carriers: up to 5
ACLR	Power vs. Time (slot)	Control channel summary	Frequency, time error	Auto Measure	
Reference power	Slot average power	(P-SS, S-SS, PBCH, PCFICH, PHICH, PDCCH, RS, MBSFN*)	Data EVM RMS, peak	Channel power	Subframe power
Abs power at defined range	Transient period length		RS EVM RMS, peak	Occupied bandwidth	P-SS, S-SS, PBCH, RS power and EVM
	Off power		Cell, group, sector ID	Spectrum emission mask	
Rel power at defined range	Constellation	EVM, relative or absolute power, modulation type	Time Alignment Error	ACLR	PDSCH/Data* QPSK power and EVM
	MBSFN*		Time alignment error trend	Multi-ACLR	
Multi-ACLR	RS TX power	Each control channels'	Time alignment error	Spurious emission mask	PDSCH/Data* 16 QAM power and EVM
Lowest reference power	PDSCH/Data* QPSK EVM	I/Q diagram	RS power difference	Slot average power	
Highest reference power	PDSCH/Data* 16 QAM EVM	Modulation format	Antenna 0 RS power and EVM	Off power	PDSCH/Data* 64 QAM power and EVM
Abs power at defined range	PDSCH/Data* 64 QAM EVM	Frequency error		Transition period	
Rel power at defined range		I/Q origin offset	Antenna 1 RS power and EVM	Time alignment error	Cell ID
		EVM RMS, EVM peak		MBSFN*	Frequency error
	Data EVM RMS		Antenna 2 RS power and EVM**	PDSCH/Data* QPSK EVM	Time alignment error
				PDSCH/Data* 16 QAM EVM	Antenna port
					Power Statistics CCDF
Option 049					
Channel Scanner (up to 6)	ID Scanner (up to 6)	Multipath Profile	Control Channel	EVM RSM, phase	Route Map
	RSRP/RSRQ dominance	Cell, group, sector ID	RS power trend	Frequency error	RSRP
Frequency or channels	S-SS RSSI dominance	Ant 0 RS Ec/Io, delay	Cell, group, sector ID	PMCH subframe power*	RSRQ
Cell, group, sector ID	S-SS Ec/Io dominance	Ant 1 RS Ec/Io, delay	Control channel table	Time alignment error	RS-SINR
Channel power	Cell, group, sector ID	Ant 2 RS Ec/Io**, delay**	(P-SS, S-SS, PBCH, PCFICH, RS 0, RS 1, RS 2**, RS 3**, MBSFN RS*)	Time offset	S-SS RSSI
RSRP/RSRQ	RSRP/RSRQ	Ant 3 RS Ec/Io**, delay**		Datagram	P-SS, S-SS power
RS-SINR	RS-SINR/S-SS RSSI			Datagram	S-SS Ec/Io
Antenna port	P-SS/S-SS power		Absolute power	Resource block power	
	S-SS Ec/Io		Relative power	Data utilization	

Longitude, latitude, and satellite in all screens

*Measurement is performed when MBMS is enabled.

**Measurement is performed when option 031 is enabled.

RFoCPRI/Interference Analyzer (Option 008, 060, 061, 062, 063, 064, and 065)

General Parameters					
Optical interface	Dual SFP/SFP+ (supports all MSA compliant SFP modules)				
Line rates	614.4 Mbps (1x) , 1228.8 Mbps (2x)	Option 008 and 060			
	2457.6 Mbps (4x)	Option 008 and 061			
	3072.0 Mbps (5x)	Option 008 and 062			
	4915.2 Mbps (8x)	Option 008 and 063			
	6144.0 Mbps (10x)	Option 008 and 064			
	9830.4 Mbps (16x)	Option 008 and 065			
Resolution Bandwidth (RBW)					
-3 dB bandwidth	1 kHz to 10 kHz (span ≤ 3.84 MHz) 1 kHz to 100 kHz (3.84 MHz < span < 30.86 MHz)	1-3-10 sequence			
Accuracy	±10% (nominal)				
VBW					
-3 dB bandwidth	1 Hz to 100 KHz	1-3-10 sequence			
Accuracy	±10% (nominal)				
CPRI Parameter					
IQ Sample width	4 – 20 (step 1)				
Mapping method	1 and 3				
TX clock	Internal/external/recovered				
Port type	Master/slave				
Map position	AxC#0 – AxC#7				
Bandwidth	1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
Measurements					
Layer-2 Monitoring		Layer-2 Term		Interference analyzer	
Port 1	Port 2	Port 1 or 2 (exclusive)		Spectrum	Sound indicator, AM/FM audio demodulation, interference ID, spectrum recorder
LOS	LOS	LOS SDI			
LOF	LOF	LOF RAI			
SDI	SDI	Optic RX level	dBm	Spectrogram	Collect up to 72 hr of data
RAI	RAI	Protocol version	1 to 10		
Optic RX level	Optic RX level	C and M HDLC rate (kbps)	No HDLC, 240, 480, 960, 1920, 2400	RSSI	Collect up to 72 hr of data
SFP Information	SFP Information			Spectrum replay	X1, x2, x4, x8
Wavelength	Wavelength	C and M Ethernet subchannel number	20 to 63	PIM Detection	
Vendor	Vendor			Single carrier	
Vendor PN	Vendor PN	Alarm Injection		Multi carrier	
Vendor rev	Vendor rev	R-LOS	Single	PIM calculator	
Power level type	Power level type	R-LOF	Single		
Diagnostic byte	Diagnostic byte	Error Injection			
Nominal rate	Nominal rate	Code	Single/rate		
Min rate	Min rate	K30.7	Single/rate		
Max RX level	Max RX level	Error rate	1E-3 to 1E-9		
Max TX level	Max TX level				

Bluetooth Connectivity (Option 006)

Personal area network (PAN)
File transfer Profile (FTP)

General Information

Frequency		
RF in	Spectrum analyzer	
Connector	Type-N, female	
Impedance	50 Ω (nominal)	
Damage level	>+33 dBm, \pm 50 V DC (nominal), 3 min	
RF out		
Connector	Type-N, female	
Impedance	50 Ω (nominal)	
Damage level	>+40 dBm, \pm 50 V DC (nominal), 3 min	
External trigger, GPS		
Connector	SMA, female	
Impedance	50 Ω (nominal)	
External ref		
Connector	SMA, female	
Impedance	50 Ω (nominal)	
Input frequency	10 MHz, 13 MHz, 15 MHz	
Input range	-5 to +5 dBm	
USB		
USB host ¹	Type A, 1 port	
USB client ²	Type B, 1 port	
SFP Cage		
Port 1	RFoFiber (with option 008)	
Port 2	SFP/SFP+ compatible	
LAN	RJ45, 10/100Base-T	
Audio jack	3.5 mm headphone jack	
External power	5.5 mm barrel connector	
Speaker	Built-in speaker	
Display		
Type	Resistive touch screen	
Size	8 inch, LED backlight, transreflective LCD with anti-glare coating	
Power		
External DC input	18 to 19 V DC	
Power consumption	42 W	49 W maximum (when charging battery)

Battery	
Type	10.8 V, 7800 mA/hr (lithium ion)
Operating time	>3 hr (typical) >1.4 hr (RFoCPRI)
Charge time	3 hr (while not operating) 9 hr (while operating)
Charging temperature	0 to 45°C (32 to 104°F) \leq 85% RH
Discharging temperature	-20 to 55°C (4 to 131°F) \leq 85% RH
Storage temperature ³	0 to 25°C (32 to 77°F)
Data Storage	
Internal ⁴	Maximum 512 MB
External ⁵	Limited by size of USB flash drive
Environmental	
Operating Temperature	
AC Power	0 to 40°C (32 to 104°F) with no derating
Battery	0 to 40°C (32 to 104°F) at charging -10 to 55°C (14 to 131°F) at discharging -10 to 50°C (14 to 122°F) at discharging with RFoCPRI
Maximum humidity	95% RH (noncondensing)
Shock and vibration	MIL-PRF-28800F class 2
Storage temperature ⁶	-30 to 71°C (-22 to 160°F)
EMC	
IEC/EN 61326-1:2006 (complies with European EMC)	
CISPR11:2009 +A1:2010	
ESD	
IIEC/EN 61000-4-2	
Size and Weight (standard configuration)	
Weight (with battery)	<4.0 kg (8.8 lb)
Size (W x H x D)	295 x 195 x 82 mm
Warranty	
2 years	
Calibration Cycle	
1 year	

1. Connects flash drive and power sensor.
2. Connects to PC for data transfer.
3. 20 to 85% RH, store battery pack in low-humidity environment; extended exposure to temperature above 45°C could significantly degrade battery performance and life.
4. Up to 3800 traces.
5. Supports USB 2.0 compatible memory devices.
6. With the battery pack removed.

Ordering Information

Description	Part Number
Standard CellAdvisor Base Station Analyzer	
9 kHz to 8 GHz spectrum analyzer 10 MHz to 8 GHz RF power eter (internal mode)	JD788B
Options	
NOTE: Upgrade options for the JD788B use the designation JD788BU before the respective last threedigit option number.	
2 port transmission measurements ¹	JD788B001
High-power CW signal generator ¹	JD788B003
Signal generator hardware	JD788B007
Optical hardware ²	JD788B008
20 MHz demodulation hardware ³	JD788B009
GPS receiver and antenna interference analyzer ^{5,6}	JD788B010
Channel scanner	JD788B012
Bluetooth connectivity ⁴	JD788B013
cdmaOne/cdma2000 Analyzer	JD788B020
EV-DO analyzer ⁷	JD788B021
GSM/GPRS/EDGE analyzer	JD788B022
WCDMA/HSPA+ analyzer	JD788B023
TD-SCDMA analyzer	JD788B025
Mobile WiMAX analyzer	JD788B026
LTE - FDD analyzer	JD788B028
LTE - TDD analyzer	JD788B029
LTE Advanced - FDD analyzer ⁸	JD788B030
LTE Advanced - TDD analyzer ⁹	JD788B031
cdmaOne/cdma2000 OTA analyzer ^{6,10}	JD788B040
EV-DO OTA analyzer ^{6,10}	JD788B041
GSM/GPRS/EDGE OTA analyzer ^{6,10}	JD788B042
WCDMA/HSPA+ OTA analyzer ^{6,10}	JD788B043
TD-SCDMA OTA analyzer ^{6,10}	JD788B045
Mobile WiMAX OTA analyzer ^{6,10}	JD788B046
LTE - FDD OTA analyzer ^{6,10}	JD788B048
LTE - TDD OTA analyzer ^{6,10}	JD788B049
RFoCPRI 614 Mbps and 1.2 Gbps interference analyzer ¹¹	JD788B060
RFoCPRI 2.4 Gbps interference analyzer ¹¹	JD788B061
RFoCPRI 3.1 Gbps interference analyzer ¹¹	JD788B062
RFoCPRI 4.9 Gbps interference analyzer ¹¹	JD788B063
RFoCPRI 6.1 Gbps interference analyzer ¹¹	JD788B064
RFoCPRI 9.8 Gbps interference analyzer ¹¹	JD788B065
Standard Accessories (can be purchased separately)	
AC/DC power adapter ¹²	JD70050326
Cross LAN cable (1.5 m) ¹²	G710550335
USB A to B cable (1.8 m) ¹²	GC73050515
>1 GB USB memory ¹²	GC72450518
Rechargeable lithium ion battery ¹²	G710550325
Automotive cigarette lighter 12 V DC adapter ¹²	G710550323
Stylus pen ¹²	G710550316

Description	Part Number
Optional RF Cable	
RF cable DC to 8 GHz Type-N(m) to Type-N(m), 1.0 m	G700050530
RF cable DC to 8 GHz Type-N(m) to Type-N(f), 1.5 m	G700050531
RF cable DC to 8 GHz Type-N(m) to Type-N(f), 3.0 m	G700050532
RF cable DC to 18 GHz Type-N(m) to SMA(m), 1.5 m	G710050533
RF cable DC to 18 GHz Type-N(m) to QMA(m), 1.5 m	G710050534
RF cable DC to 18 GHz Type-N(m) to SMB(m),1.5 m	G710050535
RF cable DC to 6 GHz Type-N(m) to DIN(f), 1.5 m	G710050536
Phase-stable RF cable with grip DC to 6 GHz Type-N(m) to Type-N(f), 1.5 m	G700050540
Phase-stable RF cable with grip DC to 6 GHz Type-N(m) to DIN(f), 1.5 m	G700050541
Optional Omni Antennas	
RF omni antenna Type-N(m), 806 to 896 MHz	G700050353
RF omni antenna Type-N(m), 870 to 960 MHz	G700050354
RF omni antenna Type-N(m), 1710 to 2170 MHz	G700050355
RF omni antenna Type-N(m), 720 to 800 MHz	G700050356
RF omni antenna Type-N(m), 2300 to 2700 MHz	G700050357
Optional YAGI Antennas	
RF Yagi antenna Type-N(f), 1750 to 2390 MHz, 10.2 dBd ¹³	G700050363
RF Yagi antenna Type-N(f), 806 to 896 MHz, 10.2 dBd ¹³	G700050364
RF Yagi antenna Type-N(f), 866 to 960 MHz, 9.8 dBd ¹³	G700050365
RF Yagi antenna SMA(f), 700 to 4000 MHz, 1.85 dBd ¹⁴	G700050366
Description	Part Number
Optional YAGI Antennas	
Directional power sensor, peak and average power 300 to 3800 MHz	JD731B
Terminating power sensor, average power 20 to 3800 MHz	JD732B
Directional power sensor, peak and average power 150 to 3500 MHz	JD733A
Terminating power sensor, peak power 20 to 3800 MHz	JD734B
Terminating power sensor, dual (average/peak) power 20 to 3800 MHz	JD736B

- Requires Option 007.
- Requires SFP/SFP+ and optical cable.
- Required for Options 020, 021, 022, 023, 025, 026, 028, 029, 030, 031, 040, 041, 042, 043, 045, 046, 048, 049.
- Includes a pair of Bluetooth USB dongles with 5 dBi dipole antenna (JD70050006).
- Recommend adding Option 010.
- Recommend adding antennas G70005035x and/or G70005036x0.
- Requires Option 020.
- Requires Option 028.
- Requires Option 029.
- Requires Option 010.
- Requires Option 008.
- Standard accessory that can be purchased separately.
- Requires RF cable G710050530.
- Requires RF cable G710050533.

Ordering Information (Continued)

Description	Part Number
Optional Optical Power Meters and Fiber Microscope Kits	
USB optical power meter with software, 2.5 and 1.25 mm interfaces, 30-inch USB extender, and carrying pouch	MP-60A
USB optical power meter – high power with software, 2.5 and 1.25 mm interfaces, 30-inch USB extender, and carrying pouch	MP-80A
KIT: FBP-P5000i digital probe, FiberChekPRO software, case, and tips	FBP-SD101
KIT: FBP-P5000i digital probe, FiberChekPRO software, case, and tips	FBP-MTS-101
KIT: FBP-P5000i digital probe, MP-60A USB power meter, FiberChekPRO software, case, tips, and adapters	FIT-SD103
KIT: FBP-P5000i digital probe, MP-60A USB power meter, FiberChekPRO software, case, tips, and adapters	FIT-SD103-C
KIT: FBP-P5000i digital probe, MP-60A USB power meter, FiberChekPRO software, case, tips, and adapters	FIT-SD113
Optional RF Adapters	
Adapter Type-N(m) to DIN(f), DC to 7.5 GHz, 50 Ω	G700050571
Adapter DIN(m) to DIN(m), DC to 7.5 GHz, 50 Ω	G700050572
Adapter Type-N(m) to SMA(f) DC to 18 GHz, 50 Ω	G700050573
Adapter Type-N(m) to BNC(f), DC to 4 GHz, 50 Ω	G700050574
Adapter Type-N(f) to Type-N(f), DC to 18 GHz 50 Ω	G700050575
Adapter Type-N(m) to DIN(m), DC to 7.5 GHz, 50 Ω	G700050576
Adapter Type-N(f) to DIN(f), DC to 7.5 GHz, 50 Ω	G700050577
Adapter Type-N(f) to DIN(m), DC to 7.5 GHz, 50 Ω	G700050578
Adapter DIN(f) to DIN(f), DC to 7.5 GHz, 50 Ω	G700050579
Adapter Type-N(m) to Type-N(m), DC to 11 GHz 50 Ω	G700050580
Adapter N(m) to QMA(f), DC to 6.0 GHz, 50 Ω	G700050581
Adapter N(m) to QMA(m), DC to 6.0 GHz, 50 Ω	G700050582
Description	Part Number
Optional Miscellaneous	
Soft carrying case	JD74050341
Hard carrying case	JD71050342
Hard carrying case with wheels	JD70050342
CellAdvisor backpack carrying case	JD70050343
External battery charger	G710550324
RF directional coupler, 700 to 4000 MHz, 30 dB, 50 W input/output; Type-N(m) to Type-N(f), Tap Off; Type-N(f)	G710050585
RF combiner, 700 to 4000 MHz, Type-N(f) to Type-N(m) ¹	G710050586
4x1 RF combiner, 700 to 4000 MHz, Type-N(f) to Type-N(m) ²	G710050587
Attenuator 40 dB, 100 W, DC to 4 GHz (unidirectional)	G710050581
JD700B series user's guide - printed version	JD700B362
USB Bluetooth dongle and dipole antenna 5 dBi	JD70050006

Description	Part Number
Optional SFP Transceiver	
SFP 4/2/1 G Fibre Channel and 1 G Ethernet, 850 nm, 150 – 500 m, SX 3.072/2.4/1.2 Gbps, 614 Mbps CPRI; 3.072/1.5 Gbps, 768 Mbps OBSAI	CSFP-4G-8-1
SFP 4G/2G/1G Fibre Channel and 1 G Ethernet, 1310 nm, 5 km, LX 3.072/2.4/1.2 Gbps, 614 Mbps CPRI; 3.072/1.5 Gbps, 768 Mbps OBSAI	CSFP-4G-3-1
SFP 4G/2G/1G Fibre Channel and 1 G Ethernet, 1310 nm, 20 km, LX 3.072/2.4/1.2 Gbps, 614 Mbps CPRI; 3.072/1.5 Gbps, 768 Mbps OBSAI	CSFP-4G-3-2
SFP+ 8/4/2 G Fibre Channel, 6/4.9 Gbps CPRI 850 nm mm multirate 4.9/3.072/2.4 Gbps CPRI and 6/3.072 Gbps OBSAI	CSFPPLUS-8G-8-1
SFP+ 8/4/2 G Fibre Channel, 6/4.9 Gbps CPRI 1310 nm SM, 10 km 4.9/3.072/2.4 Gbps CPRI and 6/3.072 Gbps OBSAI	CSFPPLUS-8G-3-1
SFP+ 1/10 G Ethernet, 1/10 G Fiber Channel 1310 nm SM 10 km 1000BASE-LX 1G and 10GBASE-LR/LW, 1/10 G Fibre Channel and 9.8 Gbps CPRI	SFPPLUS-1GE-10GE-3-1
SFP+ 1/10 G Ethernet 1310 nm SM 10 km 1000BASE-LX 1G and 10GBASE-LR/LW, 1/10 G Fibre Channel and 9.8 Gbps CPRI	SFPPLUS-1GE-10GE-3-1
Optional StrataSync™	
StrataSync asset management annual subscription for CellAdvisor signal analyzer	StrataSync-AM-CA-SA-1YR
StrataSync test data management annual subscription for CellAdvisor signal analyzer ³	StrataSync-TDMCA-SA-1YR
Optional Warranty and Calibration	
Warranty extension of 1 year for Asia and North America	JD785B200
Warranty extension of 1 year for Latin America and EMEA	JD785B201
Calibration service for Asia and North America	JD785B250
Calibration service for Latin America and EMEA	JD785B251
Optional TAP	
Optical nTAP, three-channel, 50 μm, MM, LC, 50/50 split ratio	TO3-M5-LC-55-K
Optical nTAP, three-channel, 9 μm, SM, LC, 50/50 split ratio	TO3-SM-LC-55-K

1. Recommended for LTE testing.
2. Recommended for LTE-Advanced testing.
3. Requires STRATASYN-AM-CA-SA-1YR.



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