

**VIAVI**

VIAVI Solutions



Brochure

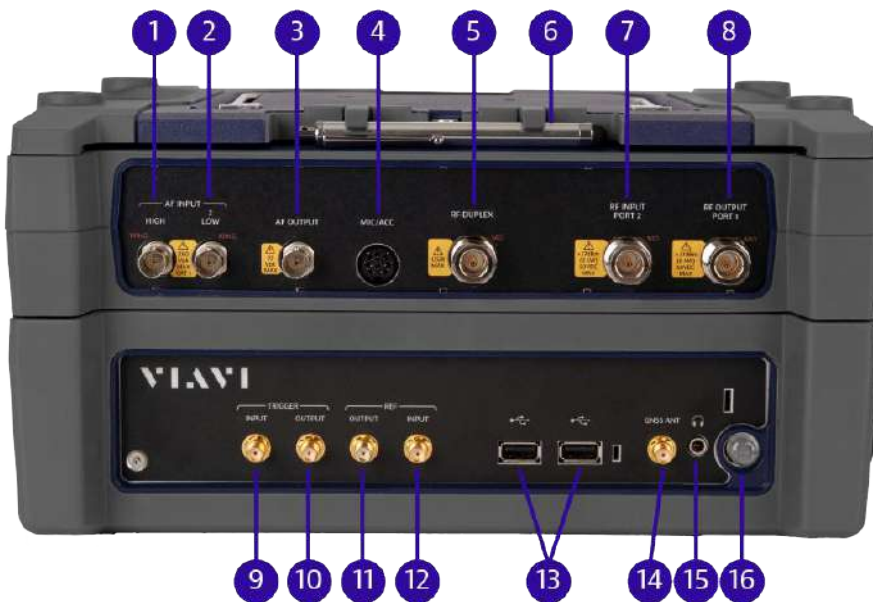
**VIAVI**  
**CX300**  
ComXpert

**testforce**

The CX300 ComXpert is an easy to use, complete communications test solution capable of testing everything from portable radios, to complex infrastructure, to broadband networks. The CX300 incorporates the most popular features from our industry leading test sets into a field portable package without sacrificing specs or performance.

### At A Glance

- Dimensions: 12.2 in x 9.5 in x 4.5 in  
30.9 cm x 24.1 cm x 11.3 cm
- Display Size: 10 inches (25.4 cm), diagonal
- Weight: 15 lbs (6.8 kg), Base Unit
- Battery: Internal, 2.25+ Hours Operation
- Rugged: 30 G Shock
- Test Range: -140 dBm to +17 dBm
- Frequency Range: 100 kHz to 6 GHz
- Technologies: Analog, P25, P25 Phase 2



- |                     |                      |
|---------------------|----------------------|
| 1. AF Input High    | 9. Trigger Input     |
| 2. AF Input Low     | 10. Trigger Output   |
| 3. AF Output        | 11. Reference Output |
| 4. Microphone       | 12. Reference Input  |
| 5. RF Duplex        | 13. USB Port (2)     |
| 6. Stylus           | 14. GNSS Antenna     |
| 7. RF Input Port 2  | 15. Earphone Port    |
| 8. RF Output Port 1 | 16. Power Button     |

CX300 Top Detail



1. SD Card
2. Ethernet
3. USB Port
4. Power Jack

CX300 Side Detail

## Standard Features

The below list of features come standard on every CX300.

- 3 GHz frequency range
- Spectrum Analyzer
- Tracking Generator
- WiFi
- VNC
- GPS
- Smart Access Anywhere
- StrataSync
- Remote Command Interface
- Bluetooth



## Optional Features

The below features are options available on the CX300.

- Frequency Range up to 6 GHz
- P25
- P25 Phase 2
- Auto-Test Applications

## A Complete Test Suite

The global land mobile radio (LMR) market is rapidly transitioning from analog to digital. The CX300 is designed with advanced frequency, power, and modulation analysis instruments for both analog and digital systems.

### The CX300 Instruments and Technologies Currently Available

- |                    |               |                      |
|--------------------|---------------|----------------------|
| • AM / FM          | • P25 Phase 1 | • Channel Analyzer   |
| • Phase Modulation | • P25 Phase 2 | • Spectrum Analyzer  |
| • Single Side Band | • LSM         | • Tracking Generator |

### CX300 Instruments and Technologies Coming Soon

- |                     |                |                           |
|---------------------|----------------|---------------------------|
| • TETRA BS          | • NXDN         | • LTE                     |
| • TETRA MS          | • dPMR         | • Vector Network Analyzer |
| • TETRA Direct Mode | • P25 Vocoder  |                           |
| • DMR               | • P25 Trunking |                           |



# Innovative User Interface

An industry-first multi-tab user interface allows you to instantly switch between test setups without having to reload settings. This user interface is similar to an internet browser with the ability to switch between test setups with a push of a button. The revolutionary QuickSwitch™ feature makes testing quick and easy by allowing you to rapidly switch between the Duplex, Transmit, and Receiver Tests without leaving the current test measurement setups. QuickSwitch is available in analog, P25, and DMR testing modes.



Multi-Tab User Interface with QuickSwitch

# P25 Test Features

The CX300 provides many P25 test features, including Linear Simulcast Modulation. The large display provides access to the distribution plot, eye diagram, constellation plot, and trajectory plot displays for in-depth modulation analysis. You can view multiple plots simultaneously, or can enlarge a specific plot to full screen for detailed viewing. Measurements are displayed in an easy to read format.



P25 Diagrams and Plots

## Auto-Test

The CX300 is designed for complete automated radio test and alignment for analog and digital radios. Using the accurate instrumentation and high-speed remote command architecture, the CX300 optimizes radio performance in minutes with minimal human interaction.

The CX300 supports numerous automated test and alignment options. Customize test sequences and parameters to fit your testing needs. Once your test is configured, the CX300 allows you to view the test progress and the test results at the same time.

Test results are automatically stored and can be exported through USB to an external PC for printing and for documentation purposes. Your test data can also be uploaded to VIAVI StrataSync or transferred to a PC or portable device utilizing the Smart Access Anywhere app.

The screenshot displays the Auto-Test software interface. At the top, there's a navigation bar with 'Home' and 'CX300 ComXpert'. Below that, the main header shows 'AutoTest - Auto Test' and 'Mode: AutoTest / Measure: Auto Test'. A control panel includes 'Status' (Testing...), 'Test Progress' (2 / 6), 'Result Summary', 'Manufacturer', 'Model', 'Test Type' (Test), 'Read Device', and 'Run' (Start button). A table lists test items with their status and results. A 'Log' section provides detailed test results for various components like Bootloader, Codeplug, DSP, Secure, Tuning, radioheader, Frequency Error, and Tx High Power.

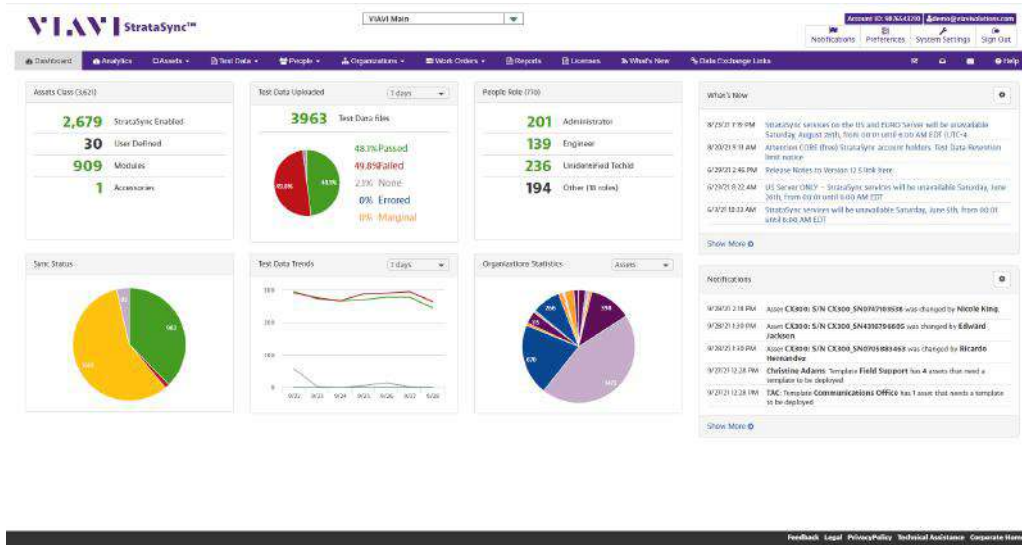
Enable	Test Name	Status	Result	Log
<input type="checkbox"/>	Radio Information	Passed	Q	Bootloader - 20.03.05 ----- Passed Codeplug - 21.00.01 DSP - 21.63.00 ----- Passed Secure - 21.00.01 Tuning - 01.10.00 radioheader: test_001 ----- Passed  ----- Frequency Error 869.8875 Hz -250.0 <= -1.949 <= 250.0 Hz Passed freqerror: test_001 ----- Passed  ----- Tx High Power 764.0125 MHz 2.3 <= 2.756769 <= 4 W Passed 769.0125 MHz 2.3 <= 2.773462 <= 4 W Passed 775.9875 MHz 2.3 <= 2.834891 <= 4 W Passed
<input type="checkbox"/>	Frequency Error	Passed	Q	
<input type="checkbox"/>	Tx High Power	Running	Q	
<input type="checkbox"/>	Tx Low Power	---	Q	
<input type="checkbox"/>	Rx BER	---	Q	
<input type="checkbox"/>	Tx Parametrics	---	Q	

At the bottom, there are navigation buttons: Home, Test Setting, Save Profiles, and Test Menu.

Auto-Test Screens

# StrataSync

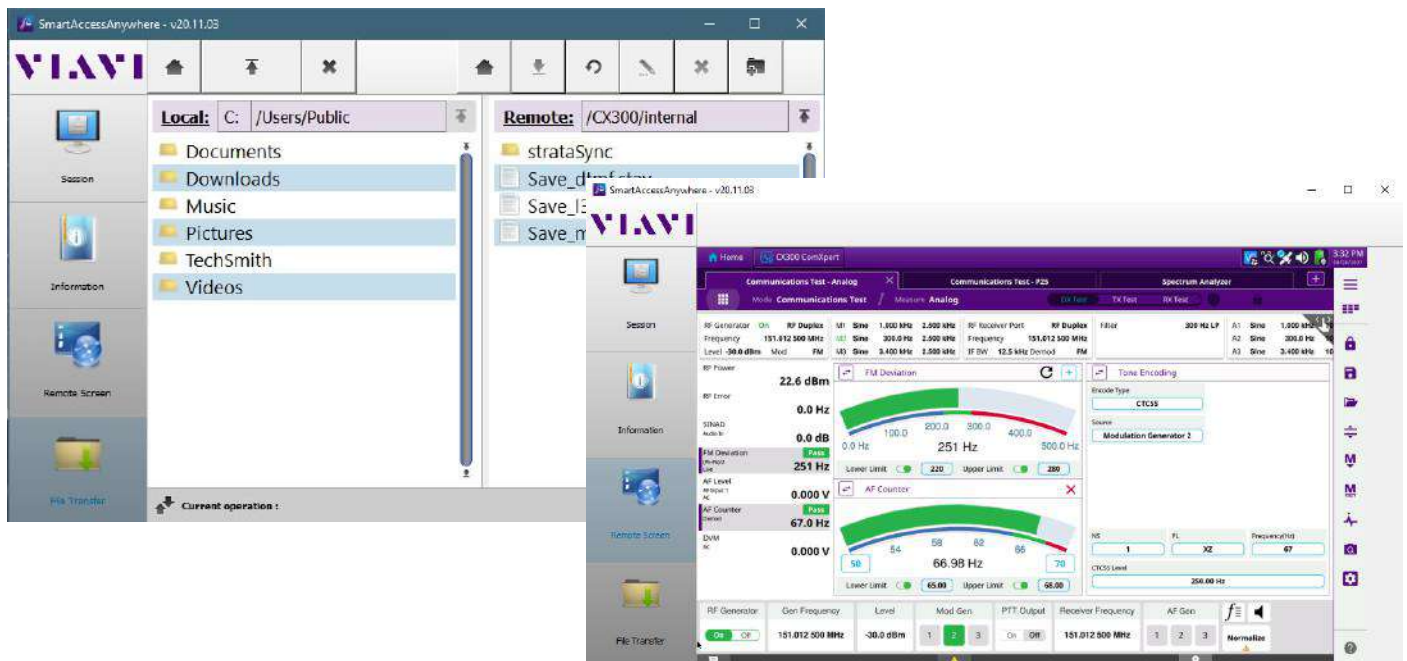
StrataSync is a hosted, cloud-based software application that provides asset configuration and test-data management from anywhere in the world. The wireless technology in the CX300 lightens your workload by synchronizing your test results to the cloud and keeping your test set updated with the latest software. Easily save and access test results for both manual and automated tests.



StrataSync Dashboard

# Smart Access Anywhere

The VIAVI Smart Access Anywhere application is a handy tool for remotely controlling the CX300. The SAA App enables remote operation from your PC or portable device, which allows you to operate the unit and transfer files from a remote location.



Smart Access Anywhere

## Ordering Information

### Versions and Options

Order Number	Description
CX300	CX300 ComXpert Communications Service Monitor
	<b>Standard Accessories</b>
	AC / DC Power Adapter
	AC Power Cord - US
	AC Power Cord - China
	AC Power Cord - Europe
	AC Power Cord - UK
	Internal Battery, 98 Watt-Hour, Lithium-Ion (Qty 2)
	Front Cover
	Desktop Stand
	Shoulder Strap
	Side Strap (Qty 2)
	Stylus
	Adapter, N(m) to BNC(f) (Qty 3)
	StrataSync
	Smart Access Anywhere
<b>Options</b>	
CX300-DDMR	DMR Test Option*
CX300-DDMRR	DMR Repeater (Requires DMR)*
CX300-DP25P1	P25 Conventional (Phase 1)
CX300-DP25P2	P25 Phase II
CX300-F6GHz	6 GHz Range Extension
CX300-SCAA	Cable and Antenna Analysis (DTF / VSWR / IL / RL)*
CX300-SCAA	Cable and Antenna Analysis (DTF / VSWR / IL / RL)*
CX300-SPSB	External Power Sensor Support, BirdRF 501xD*
CX300-SVIP	VIP Tool*
CX300-SVNA	Vector Network Analyzer (2-port, 1-path) Includes: CX300-SCAA*

### P25 Radios (Requires CX300-DP25P1)

CX300-TPHP25	Harris P25 Series (P7300, M7300, P5500, XG-75 Series)*
CX300-TPHXL	Harris XL Series*
CX300-TPKV	Kenwood Viking Series*
CX300-TPMA	Motorola APX Series*
CX300-TPMA25	Motorola ASTRO 25 XTS / XTL Series*
CX300-TPTPM	Tait P25 Series (Test Only)*

### Recommended Accessories

CX300-AANT1	Antenna Kit, 1 GHz
CX300-ABAT	Internal Battery, 98 Watt-Hour, Lithium-Ion
CX300-ACBL	RF Cable for AutoAlignment
CX300-ACH	Carrying Case, Hard Transit
CX300-ACS	Carrying Case, Soft

### Optional Accessories

CX300-ABATC	External Battery Charger
CX300-ACB	Carrying Case, Backpack
CX300-ACS10	10 Amp Current Shunt 0.01 Ohm
CX300-ADC	Power Adapter, Automotive DC / DC (Cigarette Lighter)
CX300-AGPS	GNSS / GPS SMA Mount Antenna
CX300-AMIC	Microphone
20327	Adapter, N(m) to BNC(f) (Qty 3)
82556	Attenuator (6 dB / 150 W), 1.5 GHz
140227	Attenuator (40 dB / 2 W), 18 GHz, Type N
22124982	Side Strap (Qty 2)
22132331	Stylus
22136776	Front Cover
22141588	Shoulder Strap
22152084	Desktop Stand

### Calibration Certificates

CX300-C9001	Calibration Certificate with Test Data (ISO 9001)
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## Care Support Plans

### SilverCare (Includes Extended Warranty and Calibration Plan)

SILVER-3	SilverCare - First 3 Years
SILVER-4	SilverCare - First 4 Years
SILVER-5	SilverCare - First 5 Years

### MaxCare (Includes Extended Warranty, Calibration Plan, Loaner, and Accessory Replacement)

MAXCARE-3	MaxCare - First 3 Years
MAXCARE-5	MaxCare - First 5 Years

## Certified Calibration Care Plan Add-ons (Requires corresponding SilverCare/MaxCare Plan)

CERT-CAL-DATA-3	Certified Calibration Data - Pre and Post Cal Data Report for Care Plans - First 3 Years
CERT-CAL-DATA-4	Certified Calibration Data - Pre and Post Cal Data Report for Care Plans - First 4 Years
CERT-CAL-DATA-5	Certified Calibration Data - Pre and Post Cal Data Report for Care Plans - First 5 Years

## Training

Contact us for Training and Support Options

\*Coming Soon

## VIAVI Care Support Plans

### Increase your productivity for up to 5 years with optional VIAVI Care Support Plans:

- Maximize your time with on-demand training, priority technical application support and rapid service.
- Maintain your equipment for peak performance at a low, predictable cost.

Plan availability depends on product and region. Not all plans are available for each product or in every region. To find out which VIAVI Care Support Plan options are available for this product in your region, contact your local representative or visit: [viavisolutions.com/viavicareplan](http://viavisolutions.com/viavicareplan)

## Features

\*5-year plans only

Plan	Objective	Technical Assistance	Factory Repair	Priority Service	Self-paced Training	5 Year Battery and Bag Coverage	Factory Calibration	Accessory Coverage	Express Loaner
 BronzeCare	Technician Efficiency	Premium	✓	✓	✓				
 SilverCare	Maintenance & Measurement Accuracy	Premium	✓	✓	✓	✓*	✓		
 MaxCare	High Availability	Premium	✓	✓	✓	✓*	✓	✓	✓



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