

ViewConn® Pro

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4. Specifications

VC-8200



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Safety



Caution!

Fiber optic lasers use light wavelengths not visible to the human eye.

All Lightel microscopes are eye-safe video microscopes. Nevertheless, all standard safety precautions should be followed.

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Inspect at Every Step

- Manufacturing
- QC and Receiving
- System Assembly
- Installation
- System Testing
- Network Testing
- Maintenance
- Troubleshooting



Introducing ViewConn



ViewConn was the first, and only, hand-held, all-in-one inspection and cleaning device.

ViewConn's integrated operation allows users to quickly and easily inspect, clean and reinspect, ensuring connectors are truly clean prior to mating.

ViewConn's large 3.5" display provides clear, sharp images.

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Introducing ViewConn Plus



Save Time

The ViewConn Plus dual microscope design, originated by Lightel, lets you easily inspect both male and female mated connector pairs without the time consuming need to change tips.

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Introducing ViewConn Pro

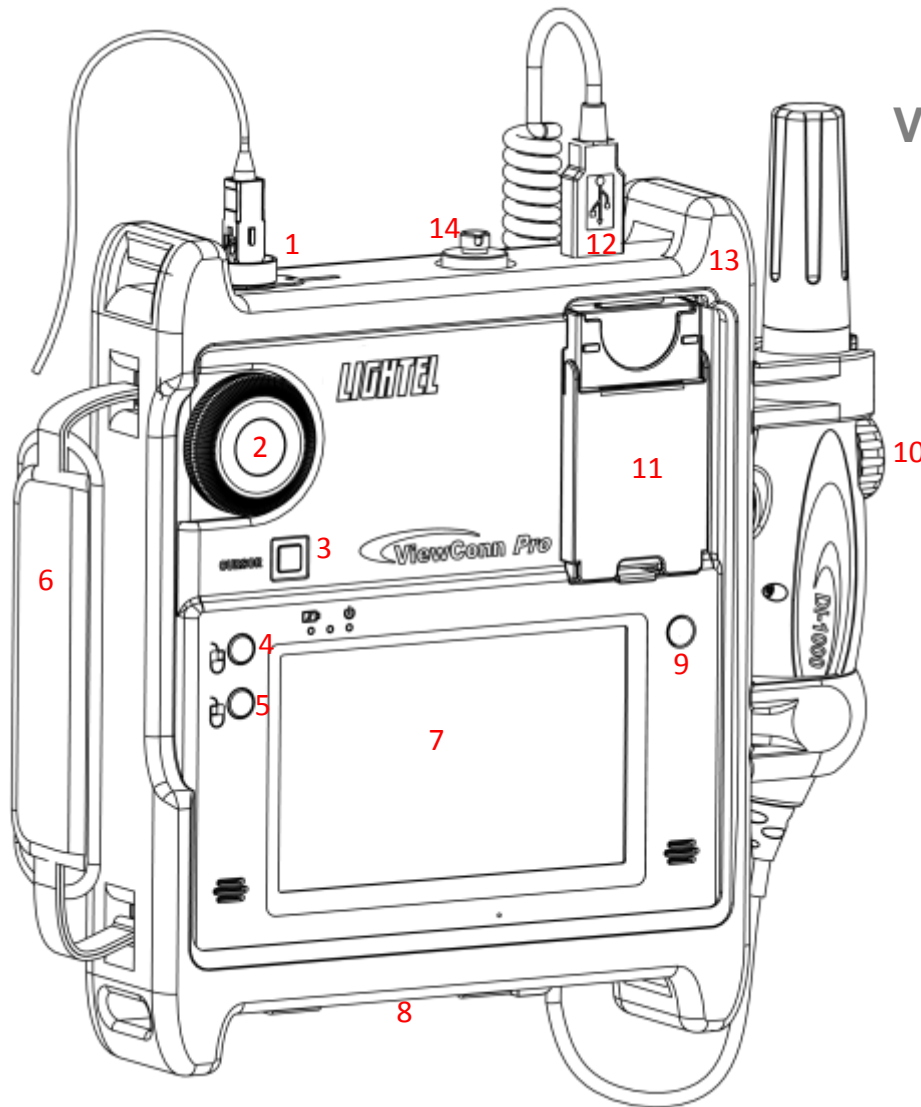


The
Comprehensive
Solution

ViewConn Pro is an integrated system for fiberoptic connector inspection, evaluation, documentation and cleaning. This hand-held tool provides dual microscopes, touchscreen controls, Pass/Fail analysis and a cleaning cassette all in a single unit.

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ViewConn Pro



VC-8200

1. ViewConn adapter tip (INT)
2. ViewConn focus knob (INT)
3. Cursor touch pad
4. Left-click button
5. Right-click button
6. Wrist strap
7. 5" color touchscreen
8. Stylus and stylus holder
9. Power button
10. Probe focus knob (EXT)
11. CC-1 cleaning cassette
12. USB port
13. Ruggedized cover
14. Optional integrated power meter

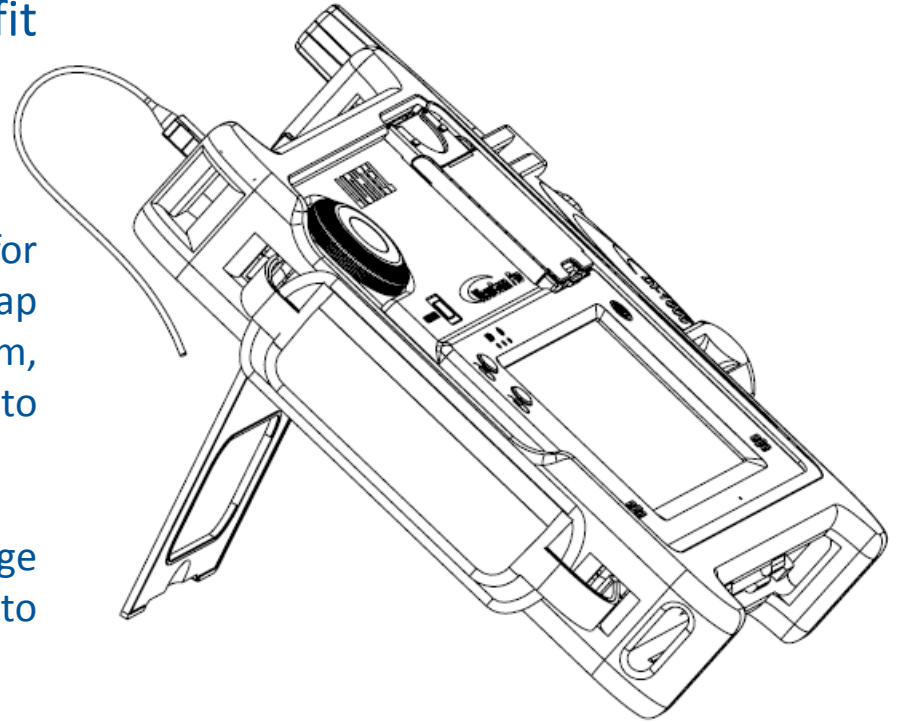
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ViewConn Pro

ViewConn Pro is designed to fit your work style.

With a fold out stand, a wrist strap for support when holding it and neck strap attachments at either top or bottom, ViewConn Pro gives you the flexibility to use it whatever way the job requires.

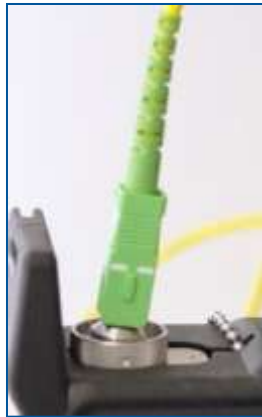
Its Li-Ion battery begins to recharge automatically whenever it is attached to an AC outlet.



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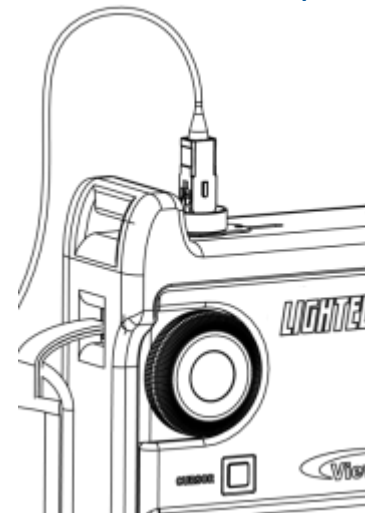
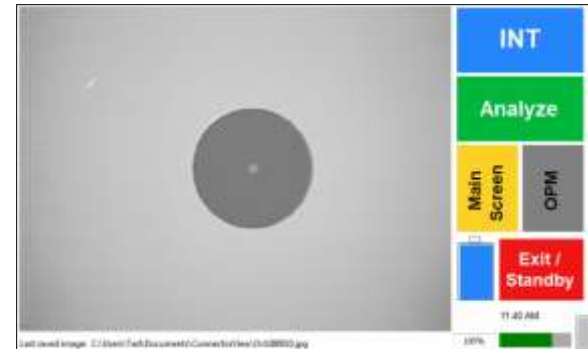
Inspecting Male Connectors

When you turn ViewConn Pro on it will be set to inspect male connectors (patchcords and jumpers) — the INT setting.



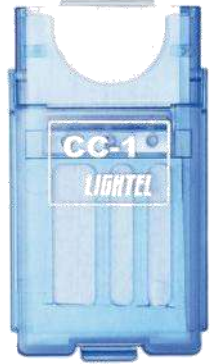
Ensure that you have the proper tip in the tip receptacle at the top of ViewConn, then place the connector into the tip.

Use the large black ViewConn focus knob to focus the image. If you are unable to focus the image, verify that the tip is fully screwed in and the connector is properly seated in the tip.



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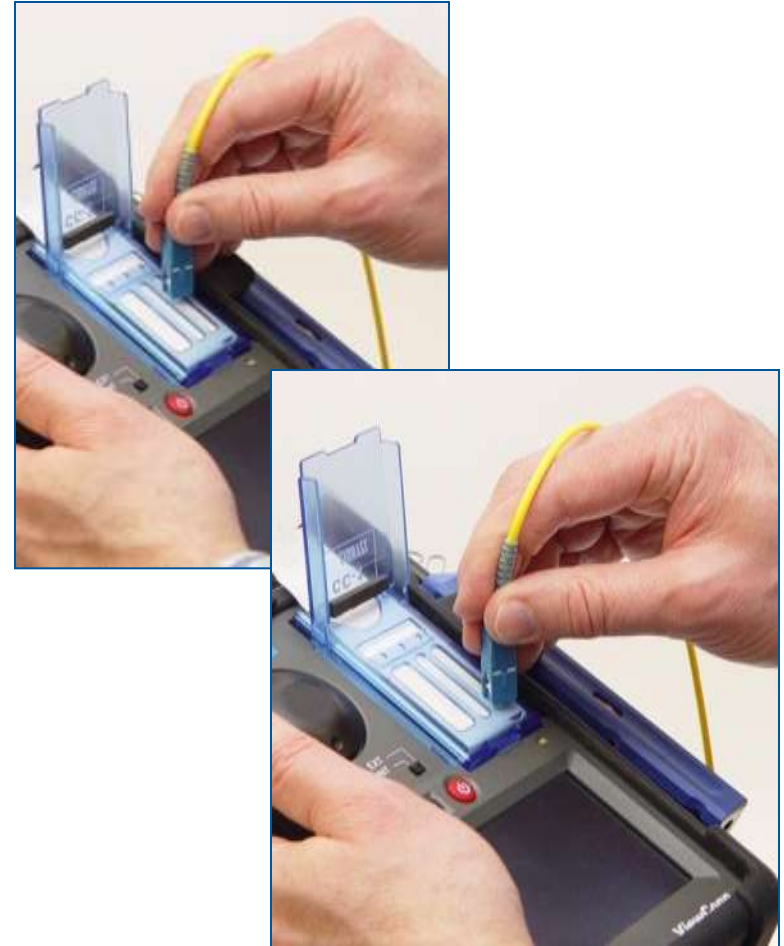
Cleaning Male Connectors



Once you have inspected the fiber, if you need to clean it, open the cover of the CC-1 cleaning cassette, and, using moderate pressure swipe the connector ferrule from the top down on a clean section of the CC-1 cassette. Do not scrub the connector back and forth and do not reuse a section of cleaner. Reinsert the connector in the tip to verify that it is now clean.

If clean, make sure that the mated connector is also clean, before installing or reinstalling.

If the connector was not clean, repeat the procedure and again recheck.



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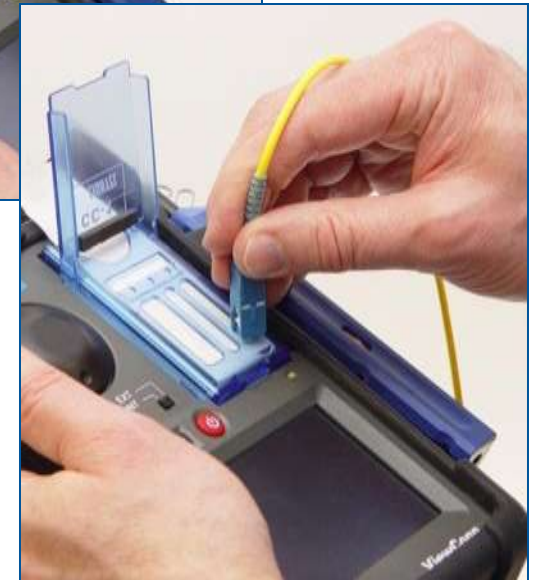
Cleaning Male Connectors

Wet Cleaning

If you decide you need to wet clean a connector, use a solvent dispenser like the optional Chemtronics Electro-Wash[®] pen dispenser to lightly wet a clean section of a CC-1 sheet. Less solvent is best.

Always go from the wet portion to the clean dry portion. You always want to finish in a dry section of the sheet to be sure the solvent has been removed.

Reinspect your connector as before to verify it is clean.



CC-1 Cleaning Cassette

When you have used all three slots on a CC-1 cleaning sheet, pull the sheet out to advance it to the next sheet. The cassette cover must be open to advance the sheet. If you wish to tear off a sheet, first close the cover. (A quick twisting motion works best to tear off the sheets.)

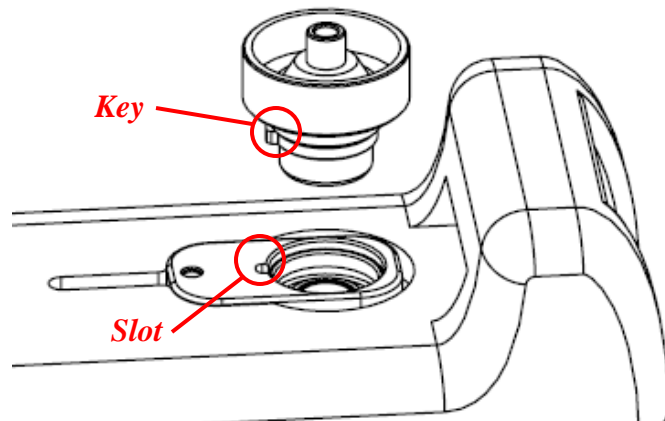


To install the CC-1 cleaning cassette, place the tab at the top of the CC-1 in the slot at the top of the cassette holder. Then push the cassette in the space until it clicks into place.

If you wish to remove the cassette, push up on the small blue plastic tab at the base of the cassette and lift the cassette out.

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Changing ViewConn Tips



All ViewConn tips are intended for use strictly with male connectors. Most ViewConn tips are universal tips, either PC or APC, for all connectors with the same ferrule size. All tips work for both single mode and multimode connectors.

To install a ViewConn tip, align the tip's key with the slot in the tip receptacle and seat it. Once seated, screw the tip in clockwise until tight.

To remove a ViewConn tip, unscrew it counterclockwise and lift out.

Inspecting Male APC Connectors

APC connectors are angled and need tips designed specifically to view them. (Note the angle on the tip stem.)



A male APC connector is keyed. The key should be directly to the front of ViewConn to provide the best image. Or you can simply turn the connector until it has the best contrast.

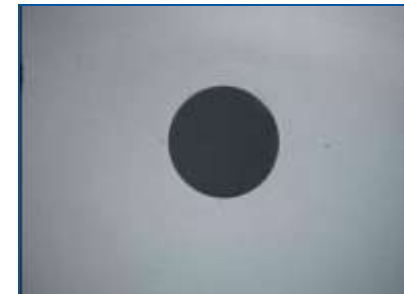


Key

**Alignment
Mark**



Improperly Keyed APC Connector

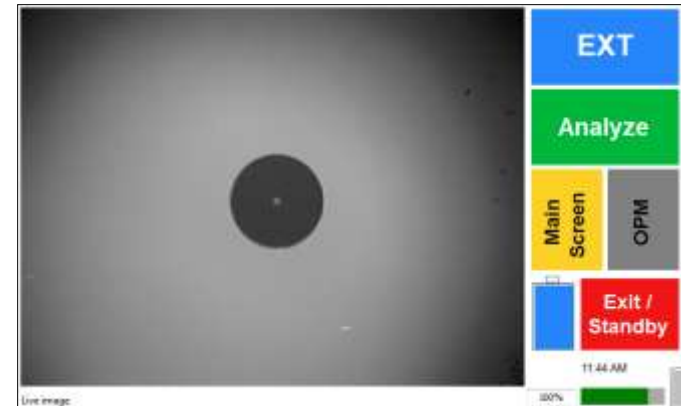


Properly Keyed APC Connector

Inspecting Female Connectors

To inspect female connectors (in bulkheads and patch panels) touch the INT portion of the touchscreen. It will change to read EXT. The image displayed will now be coming from the probe.

The Field of View from the probe is wider allowing you to more easily locate the ferrule.

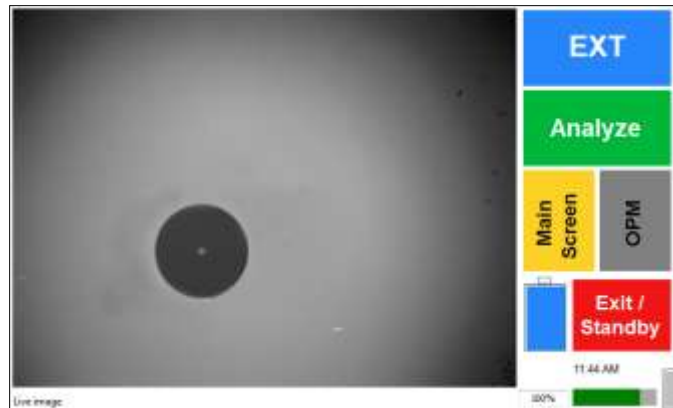


With the correct tip installed for the connector type, place the tip of the probe into the adapter and use the focus knob on the probe to focus the image. If you are unable to focus, you may not have the probe tip fully inserted. Make sure it seats fully, and refocus.

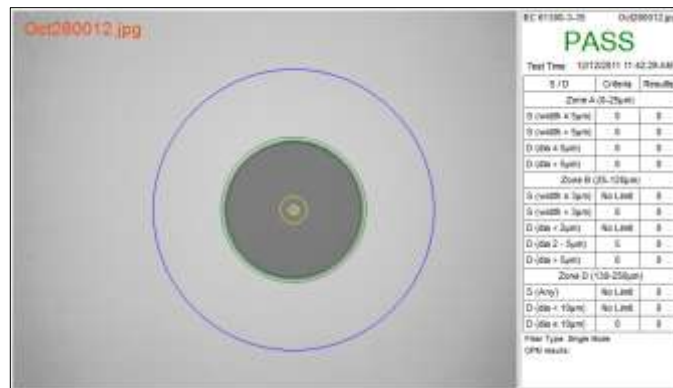
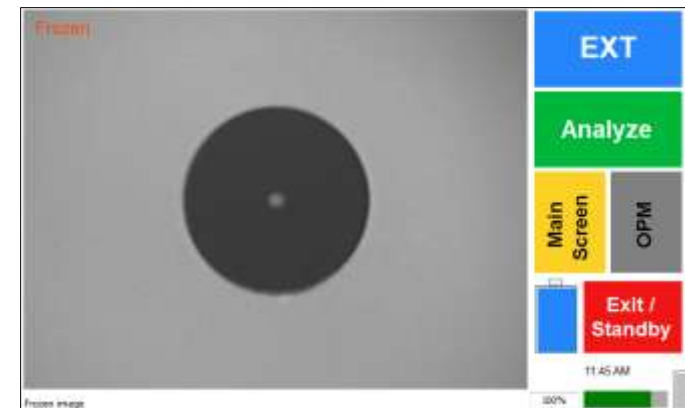
Remember, when using the probe, focus with the probe focus knob.

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Inspecting Female Connectors



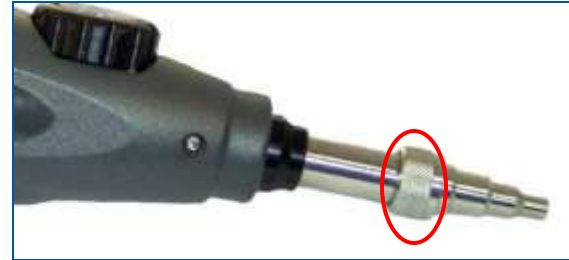
When you have focused on the ferrule, you can freeze it to examine it, enlarge and automatically center it, and then analyze it.



Or you can choose to just immediately analyze it.

Changing Probe Tips

Probe tips are held in place with a lock nut.



Holding the probe, turn the lock nut counter-clockwise to loosen it fully, and then remove the tip.



All tips have a slot and fit into the key at the top of the probe. Slide the new tip in place and slip the lock nut over the tip. Tighten the nut snugly – if the tip is loose, it may not focus properly.



Probe Tips

Most probe tips are for female connectors. (Universal male tips are available for the probe for special applications.) Female tips are specific to the type of connector being inspected. All tips work for both single mode and multimode connectors.

Probe tips are available in a variety of styles for specialty applications including 60° angled tips extended tips and tips for ribbon connectors.

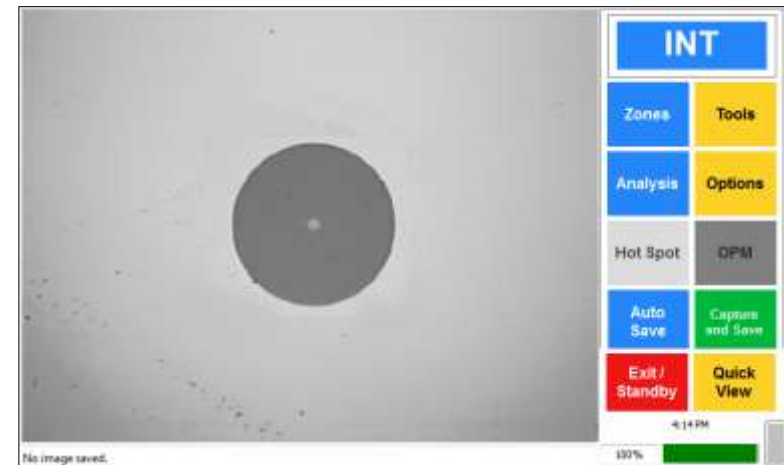
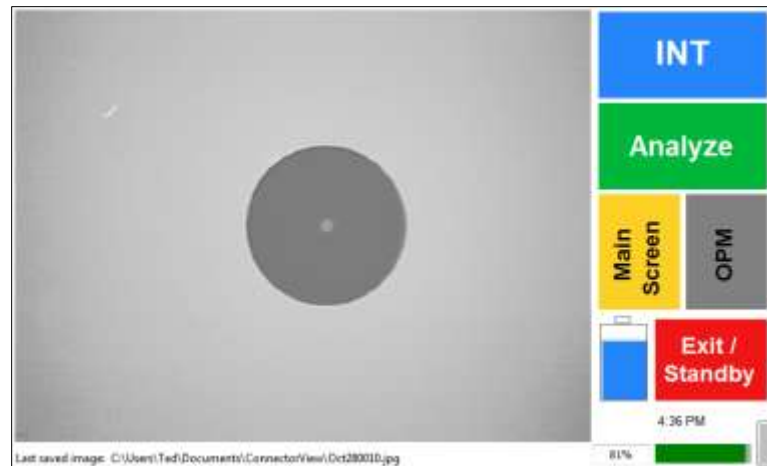
(Visit the [Series 2 Tips](http://www.lighttel.com) page on the Lighttel website www.lighttel.com for a list of all current probe tips.)



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Using ViewConn Pro

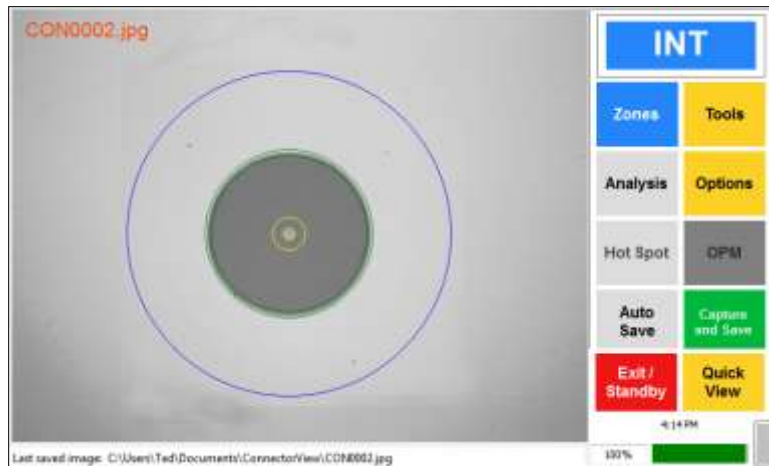
ViewConn Pro is simple to use. The main screen provides access to all the ViewConn Pro features and all the controls you need to view, capture and analyze connectors.



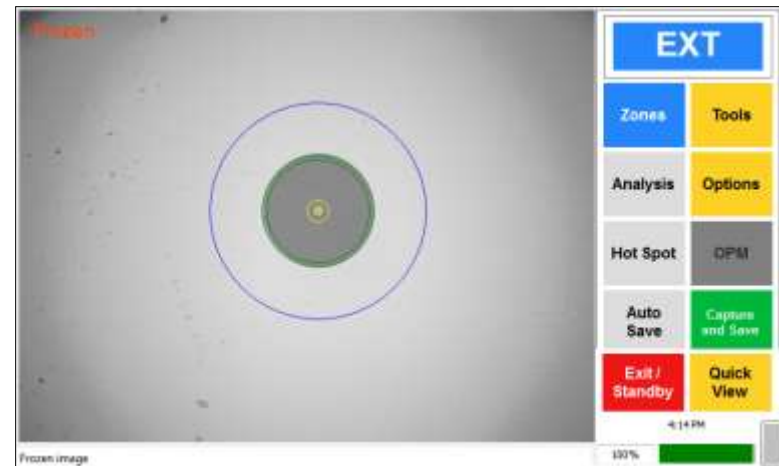
Or work from the Quick View screen with large simplified controls and a large graphic battery level indicator.

Using ViewConn Pro

Capturing an image is as simple as a touch of the screen.

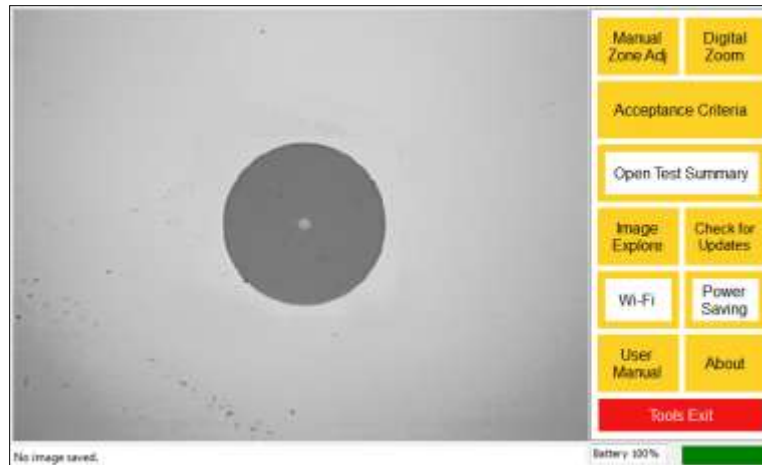
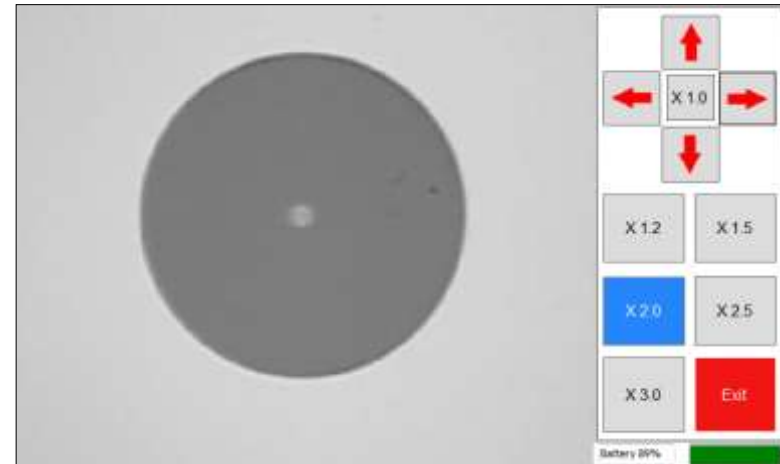


With another touch you can shift to the probe and save images from it.



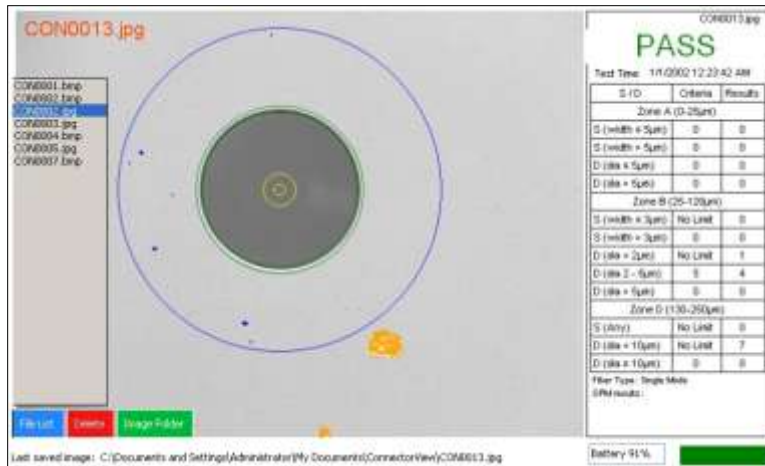
Using ViewConn Pro

You can digitally zoom the connector for a closer look.



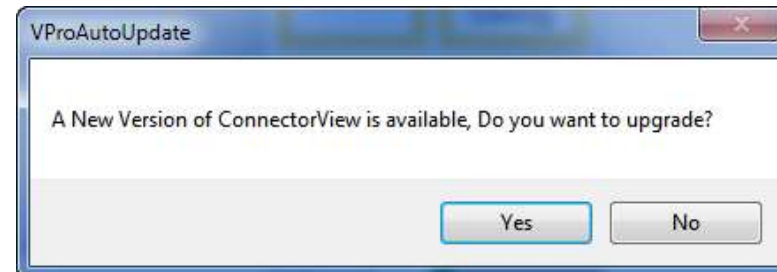
Individualize your power saving settings or set up a Wi-Fi connection.

Using ViewConn Pro



You can easily go back and view any Analysis Report or image you have saved.

Check to ensure you are running the most recent Lightel software update for ViewConn Pro.

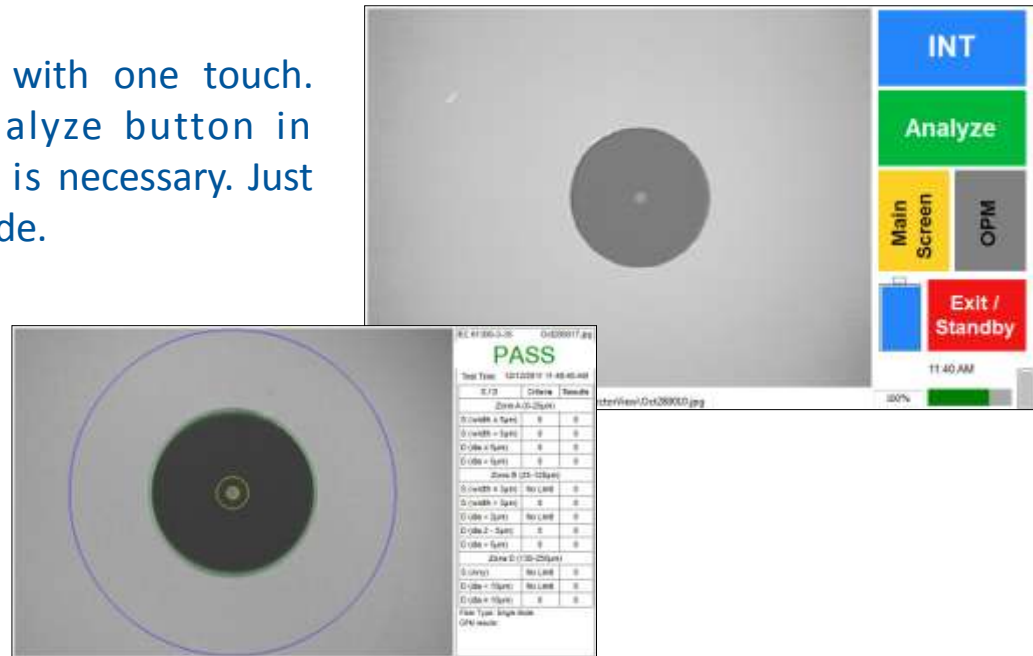


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Analyzing Connectors

You can analyze connectors with one touch. Simply touch the green Analyze button in Quick View. No calibration is necessary. Just select Single mode or Multimode.

The ConnectorView Plus software can be set to automatically save the Analysis Report or you can choose to save only selected reports. Again it's as simple as a touch of the screen.



The data from each saved report is also automatically saved in a Summary Report.

Analyzing Connectors

ConnectorView Plus software use IEC 61300-3-35 as the default standard for its analysis, but the acceptance criteria can be modified to allow for different corporate standards. Multiple standards can be stored and reused. A new Summary Report is automatically generated whenever criteria are changed.



Load from ...	Diameter	Scratches (HOLS)	Defects (Diameter)
Single Mode Fiber			
Zone A (D-25µ)	Any	0	Any
	< 5µ	No Limit	< 5µ
	> 5µ	0	> 5µ
Zone B (D5-120µ)	Any	0	Any
	< 5µ	No Limit	< 5µ
	> 5µ	0	> 5µ
Zone C (D10-120µ)	Any	No Limit	Any
Zone D (D10-150µ)	Any	No Limit	> 10µ
Multimode OM3			
Zone A (D-85µ)	< 5µ	No Limit	< 5µ
	> 5µ	0	> 5µ
Zone B (D4-120µ)	< 5µ	No Limit	< 5µ
	> 5µ	0	> 5µ
Zone C (D10-120µ)	Any	No Limit	Any
Zone D (D10-200µ)	Any	No Limit	> 20µ

On Screen Keyboard Default Apply Exit

Manual Zone Act Digital Zoom

Acceptance Criteria

Open Test Summary

Image Explore Check for Updates

Wi-Fi Power Saving

User Manual About

Tools Exit

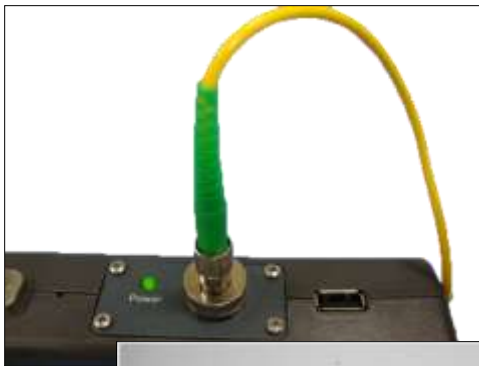
AC Powered



The Analysis Report shows that IEC 61300-3-35 was the standard used for this analysis.

ViewConn Pro Power Meter

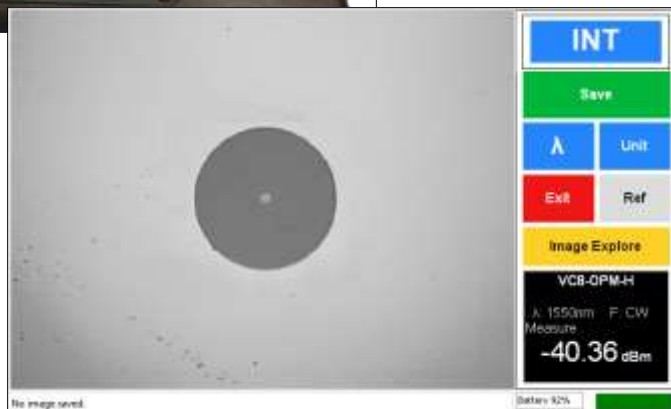
VC8-OPM installed in ViewConn Pro



ViewConn Pro has an optional integrated power meter. This add-in module can be installed by Lightel or can be easily installed by the user. Two versions are available for standard or for higher power ranges.

Universal 2.5mm and 1.25mm tips are included with each power meter. These tips work with both PC and APC connectors.

Power readings can be taken and saved by themselves or linked to an Analysis Report.



Case



ViewConn Pro comes in a reinforced soft case. With both a shoulder strap and handle, there is room enough for additional cleaning supplies and other tools.

A tipbox with adjustable compartments capable of holding any ViewConn Pro tip is also included in the package.



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ViewConn Pro Specifications

ViewConn (Pro)

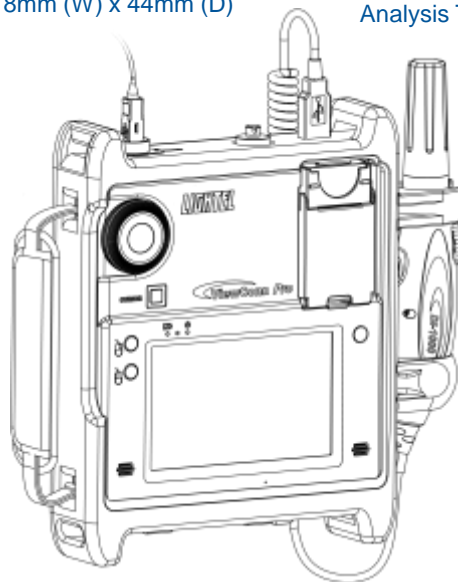
Field of View	~464µm x 346m
Resolution	0.5µm detectable
Optical Sensor	CMOS
Light Source	Blue LED
LCD Display	5" LCD color touchscreen
Power Supply	<ul style="list-style-type: none">◦ Li-Ion internally rechargeable battery or◦ 12V DC adapter◦ Adjustable automatic power saving◦ Low battery indicator
Battery Life	≥3 hours (continuous)
Electrical Ports	<ul style="list-style-type: none">◦ DC adapter plug port◦ 1 USB2.0 port
Dimensions (including ruggedized cover)	186mm (H) x 218mm (W) x 44mm (D)
Weight (including battery and ruggedized cover)	1.4kg
Storage	8GB SSD
Memory	1GB
Processor	Atom Z530
Internet Connection	Wi-Fi

Probe

Field of View	~660µm x 495µm
Resolution	0.5µm detectable
Optical Sensor	CMOS
Light Source	Blue LED
Power Supply	USB2.0 connection with ViewConn
Output	USB2.0 plug
Dimensions	35mm ø x 175mm (without cap)

Software (pre-loaded)

Operating System	Windows XP®
ConnectorView™ Plus	<ul style="list-style-type: none">◦ Pass/Fail Analysis◦ Full screen, touchscreen operation
Analysis Time	~4 seconds (average)



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