

# Smart Notes

Safety Controls

Varioskan LUX Multimode  
Microplate Reader



## How can built-in smart safety controls help avoid errors in microplate assay experiments?

The potential for experimental errors—from user mistakes to power outages—are a frustrating reality of microplate reading. But smart technology can give you comfort, with automatic safety checks designed to alert you of potential problems before they happen. These features ease workflow and help you avoid wasting expensive reagents, samples, and time.

How can a read go wrong? An incorrect dispensing position will give you unreliable results—requiring you to re-run the assay or, if undetected, leading you to use faulty data. The same is true if you forget to prime the dispensers. Risks don't end there; a simple spill inside the instrument can damage optics, while a power outage can erase data. It's nearly impossible to prevent all errors, but you can be sure your microplate reader is equipped with smart controls and software to keep your research on track.



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# How do the safety control features of Varioskan LUX help prevent mistakes that can occur from common experimental errors?

## Smart safety controls designed to help you prevent errors.

### Alerting You to Problems Before They Happen

The Thermo Scientific™ Varioskan™ LUX Multimode Microplate reader uses automatic safety checks to anticipate potential mistakes. Clear and timely notifications can help you protect valuable samples and data while ensuring the integrity of your instrument. This is especially important when multiple users are sharing the instrument, running assays for various applications.

### Keeping Your Instrument Intact

An automatic plate check prevents accidental measurements and keeps reagents from dispensing inside the instrument without a microplate. Varioskan LUX includes a built-in shaker. But with shaking can come spills. Shaking speed and force are contained to plate-specific levels to avoid liquid spillage; 48-well plates have different limits than 96-well plates.

### Preventing Dispenser Mistakes

Varioskan LUX can be equipped with dispensers that add reagents automatically. Complementing this feature are quality checks to ensure the liquid is properly dispensed, avoiding costly mistakes: Automatic prime check confirms the dispenser has been primed prior to starting the run, a head position sensor verifies that the dispensing head is correctly placed so that liquid will be dispensed into the right wells and a dispensing volume control ensures that liquid volume doesn't exceed limits of the microplate well. The run simply won't begin unless all parameters are met.

### Protecting Data During the Run

Varioskan LUX is paired with the Thermo Scientific™ SkanIt™ software, which is designed to notify you if something isn't right—a mismatch or a wrong setting that could throw off your results and waste time, money, or both. Measurement data is captured throughout the run, not just at the end, so not all is lost if a long run is unexpectedly interrupted.

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### Summary

Choose a smart instrument for assay research. The Varioskan LUX raises the bar for safety and data protection, with technology that works in your best interest.

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► **Learn more about the Varioskan LUX at [www.thermoscientific.com/varioskanlux](http://www.thermoscientific.com/varioskanlux)**

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**Australia** +61 39757 4300  
**Austria** +43 1 801 40 0  
**Belgium** +32 53 73 42 41  
**China** +800 810 5118 or +400 650 5118  
**France** +33 2 2803 2180  
**Germany national toll free** 0800 1 536 376  
**Germany international** +49 6184 90 6000

**India toll free** 1800 22 8374  
**India** +91 22 6716 2200  
**Italy** +32 02 95059 552  
**Japan** +81 3 5826 1616  
**Netherlands** +31 76 579 55 55  
**New Zealand** +64 9 980 6700  
**Nordic/Baltic/CIS countries** +358 9 329 10200

**Russia** +7 812 703 42 15  
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**Switzerland** +41 44 454 12 22  
**UK/Ireland** +44 870 609 9203  
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