

UV-FACTS  
ARTICLE SERIES  
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# UVLON® - Advanced Protection for UV-C Lamps

WHAT UVLON IS, THE BENEFITS IT OFFERS,  
AND WHY IT WILL BECOME A STANDARD OF SAFETY AND QUALITY FOR UV-C SYSTEMS.

UV-C technology is increasingly used to ensure safety, hygiene, and quality across multiple sectors, from food and pharmaceutical to medical and air treatment. To guarantee maximum system efficiency, without compromising protection and regulatory compliance, it is essential to integrate dedicated safety solutions.

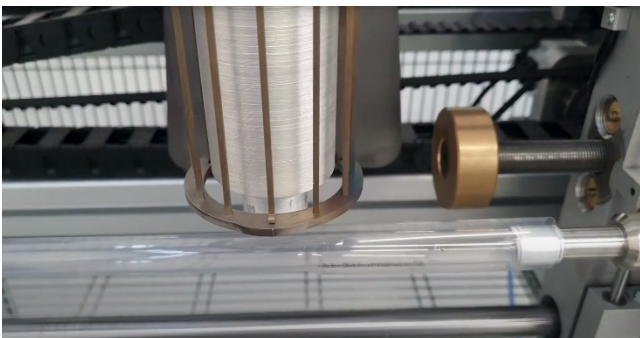
UVLON is an innovative protective sleeve that combines durability, reliability, and transparency to UV-C light. In this article, we will explore what UVLON is, the benefits it offers, and why it is becoming a new standard for UV-C applications.



## WHAT IS UVLON

UVLON® is a special thermo-shrink sleeve made of FEP (Fluorinated Ethylene Propylene), designed and registered as a Light Progress trademark for its UV solutions.

Thanks to its unique properties, it allows up to 85% UV-C light penetration through its surface, maintaining transparency and treatment effectiveness, while ensuring the highest levels of protection and safety.



Light Progress has designed and built a **one-of-a-kind automatic machine** capable of applying and heat-shrinking UVLON® onto lamps in a fully **mechanized and controlled** process. This exclusive technology ensures precision, consistent quality, and maximum protection durability, making Light Progress lamps **truly unique worldwide** in terms of reliability and strength.

## THE ADVANTAGES – ROI, EFFICIENCY AND COMPLIANCE

### Reduced operating costs

The mechanical protection safeguards every UV-C tube and extends the lifetime of the lamps. This means fewer replacements, less downtime, and lower maintenance expenses, generating an immediate return on investment.

### Increased production reliability

By containing potential glass fragments in case of accidental breakage, UVLON® ensures production continuity, avoiding costly downtime and product waste. This is critical not only in food and pharmaceutical sectors but also in medical, cleanroom, and HVAC applications, where a single incident can cause significant economic and reputational damage.




### Safety and brand protection

For QARA managers, UVLON® is a strategic investment: it ensures compliance with international standards (FDA, IP44) and minimizes the risk of non-compliance, product recalls, or legal disputes — directly protecting the brand and strengthening market trust.

### Resistance under extreme conditions

The sleeve does not adhere to substances and withstands wear, aggressive chemicals, and high temperatures. This provides consistent reliability even in demanding applications, avoiding unforeseen costs and extending the overall service life of UV systems.

### Benefits by department:

Department	Key Benefit	ROI Impact
 PROCUREMENT	Single investment reducing replacement and management costs	Optimized budget, lower TCO (Total Cost of Ownership)
 MAINTENANCE	Fewer failures, fewer extraordinary interventions, and greater system reliability	Less downtime, savings on labor and spare parts
 QARA	Compliance with standards and regulations (FDA, IP44) and reduced contamination risks	Prevention of recalls, brand protection, reduced legal and reputational risks

## AN OPTION TODAY, A STANDARD TOMORROW



At present, UVLON® is offered as an optional accessory, available together with UV systems. However, for several applications in the food, pharmaceutical, medical, and HVAC/air conditioning sectors, Light Progress already supplies UV-C lamps with UVLON® protection as the default configuration.

From 2026, this option will become standard: UVLON® will no longer be an accessory, but an essential and integrated component of our solutions in the food, pharmaceutical, medical, and HVAC sectors.

## REGULATIONS AND RESPONSIBILITY

UVLON® is not just a protective sleeve, it is a practical safeguard that makes UV-C lamps easier and safer to handle. Unlike bare glass, the sleeve allows operators to **touch, move, and install lamps more freely** without risk of damage or breakage.

It also makes cleaning **simpler and more effective**, since the smooth FEP surface is more resistant to wear and chemical agents compared to glass.

This translates into tangible advantages:

- for **equipment manufacturers** in the food, pharmaceutical, medical, and HVAC/air conditioning industries, who can deliver more robust and user-friendly solutions,
- and for **end users** in production plants, where improved lamp durability and safer handling directly enhance operational reliability.

By integrating UVLON® as a standard, we ensure higher safety, easier maintenance, and greater long-term value for both manufacturers and end users.

## ACCURACY IN PERFORMANCE CALCULATIONS

It is important to emphasize that our microbial reduction estimates for UVC systems installed at customer sites already take into account the dose adjustment factor due to the use of UVLON®.

As a result, the declared effectiveness values for current applications remain unchanged and fully reliable.

## THE LIGHT PROGRESS DIFFERENCE

Although some competitors also use protective sleeves, Light Progress stands out thanks to a dedicated investment: the purchase of a specific machine that allows the optimal and high-quality application of UVLON®.

This guarantees maximum strength and reliability of the sleeve even under particularly challenging conditions, such as:

- high operating temperatures,
- intensive cleaning procedures for machinery,
- complex and aggressive production environments.

**To learn more about the technical features, receive personalized advice, or consult directly with our technical team, you can contact us at: [info@lightprogress.it](mailto:info@lightprogress.it)**

**We will be glad to support you in choosing the solution that best fits your needs.**