



**Panasonic**  
INDUSTRY

# Extraction and Filtration Systems



**LFE series**



# LFE 250

## Highlights:

- › Very small and compact
- › 3-stage filter (prefilter, HEPA and carbon filter - combined filter)
- › Low noise level

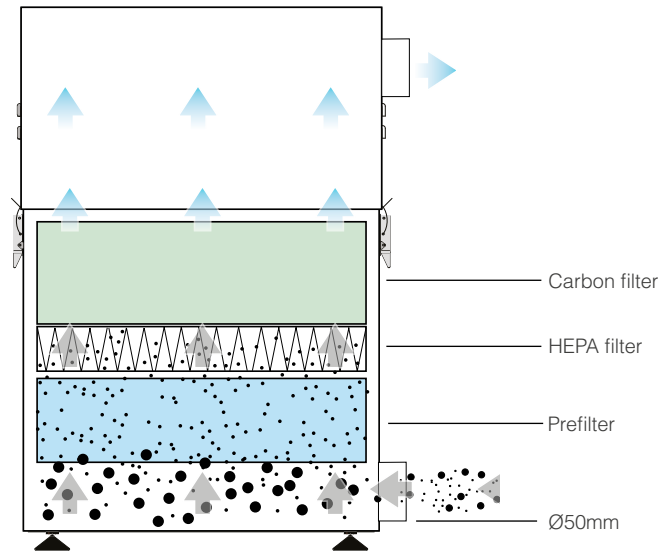
The LFE-250 has been developed to offer a cost-effective solution for simple applications. The unit comes in a very compact size and has a low noise level.

## Typical applications:

- › Laser marking operations with low throughput rate
- › Colour change of plastics
- › Black marking

## Features:

- › 3-stage filter (prefilter and combined filter consisting of HEPA filter and carbon filter)
- › Filter condition indicator
- › 4m hose with a diameter of 50mm



Model LFE-250		
Specifications		Spare part
Flow rate	max. 180m <sup>3</sup> /h	
Power supply	230V 50/60Hz	
Noise level (at 50–100%)	max. 60dB (A)	
Extraction hose	4m length with a diameter of 50mm	
Dimensions (WxDxH)	380mm x 380mm x 600mm	
Marking	CE	
Prefilter	Filter media: Glass fiber Surface media area: 6m <sup>2</sup> Filter efficiency: F8 (95% @ 0.8µm)	LFE-250-PF
Main filter (combined filter)	Filter media: Glass fiber Filter efficiency: H14 (99.997% @ 0.3µm) Activated carbon: 8.5kg Filter housing: Zintec mild steel	LFE-250-CF
Net weight	approx. 40kg	



# LFE 255

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## Highlights:

- › Space-saving design
- › Easy handling
- › Extremely quiet operation

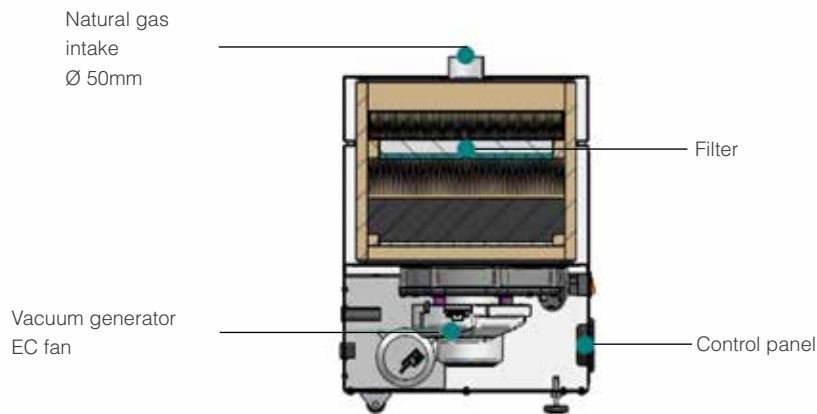
The LFE 255 should be implemented on laser workplaces or laser processing machines in such a way that the hazardous materials are sucked away directly at the position where they occur.

## Features:

- › Variable volume flow control
- › Loaded particulate filter indicator
- › Rear-mounted, 9-pin Sub-D connector with these features:  
Loaded particulate filter indicator: triggered when the filter is saturated
- › Operation status message
- › Remote I/O
- › Switch for remote control

## Typical applications:

- › Laser marking operations with low throughput rate
- › Colour change of plastics
- › Black marking



Model LFE-255		
Specifications		Spare part
Volume flow rate	max. 190m <sup>3</sup> /h	
Nominal volume flow rate	max. 80m <sup>3</sup> /h at 1900Pa	
Power supply	230V 50/60Hz 1A	
Noise level (at 50–100%)	55–58dB (A)	
Extraction hose	4m length with a diameter of 50mm	
Dimensions (WxDxH)	380mm x 352mm x 493mm	
Degree of protection	IP 54	
LED display	Loaded particulate filter indicator	
Prefilter mat	Particulate prefilter Z-line filter F9 + filter mat M5 Filter mat M5-02, 1 set (10 pcs.); filter in accordance with DIN EN 779	LFE-255-Z LFE-255-M5
Main filter (combined filter)	HEPA H13 with activated carbon (99,95%) Particulate main filter + gas filter/activated carbon	LFE-255-ACD
Net weight	approx. 35kg	
Product package	Extraction unit with panel filter, filter mat, particulate filter, gas filter (activated carbon and chemical sorbent); 4m hose	



# LFE 280

## Highlights:

- › Powerful 3-stage filtration system
- › Auto voltage sensing (90–257V) for global usage
- › High contrast display with touch functionality
- › Remote control
- › Easy filter replacement – front door opening

The LFE-280 offers unique functions in one compact device. The integrated voltage sensing function automatically adjusts and therefore is usable for all voltages all over the world.

## Features:

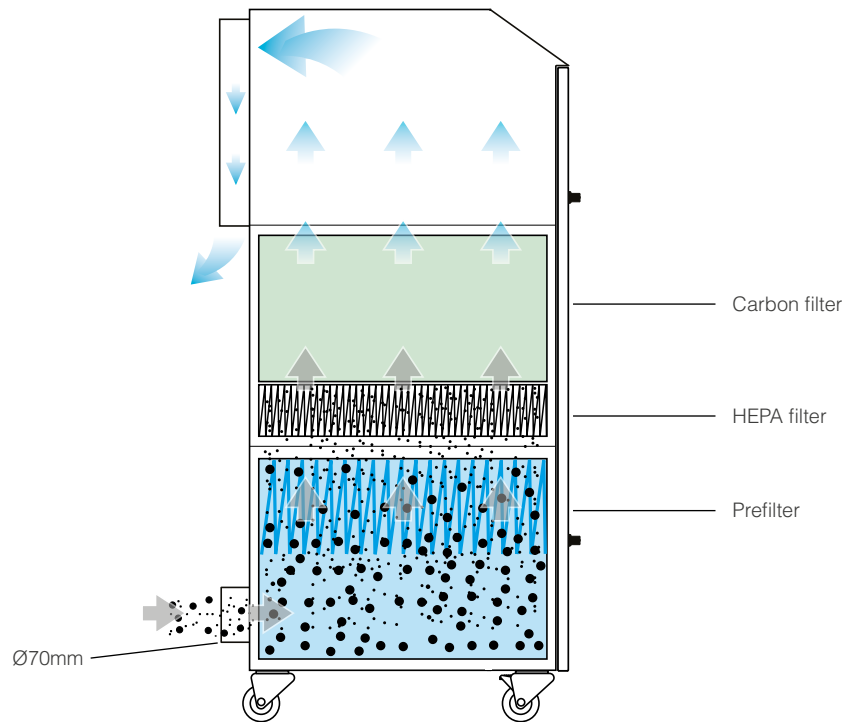
- › Auto voltage sensing for global usage
- › Automatic flow control in a closed control loop
- › 3-stage filtration system (prefilter and combined filter with HEPA filter and activated carbon filter)

## Typical applications:

- › Marking with high throughput rate
- › Laser engraving
- › Laser marking on metal, plastics or organic materials

Furthermore, the filter performance is enhanced by the technology of a reverse flow filter. This ensures a longer life cycle.

- › Real time airflow reading
- › Filter status warnings
- › Remote diagnostics via USB



Model LFE-280		
Specifications		Spare part
Air flow	max. 380m <sup>3</sup> /h	
Power supply	90–257V 50/60Hz	
Noise level (at 50–100%)	<60dB (A)	
Extraction hose	4m length with a diameter of 50mm	
Dimensions (WxDxH)	430mm x 430mm x 980mm	
Marking	CE, UL	
LED display	Loaded particulate filter indicator	
Prefilter	Fine particulate air filter F8	LFE-280-PF
Main filter (combined filter)	Glass fiber H14 + activated carbon 15kg	LFE-280-CF
Net weight	approx. 65kg	



# LFE 300

## Highlights:

- › Flexible use: Great variation of materials and laser processes
- › User-friendly filter replacement
- › High suction performance

The LFE 300 is perfectly suited for the extraction and filtration of non-flammable dust in non-explosive air mixtures occurring during laser processes.

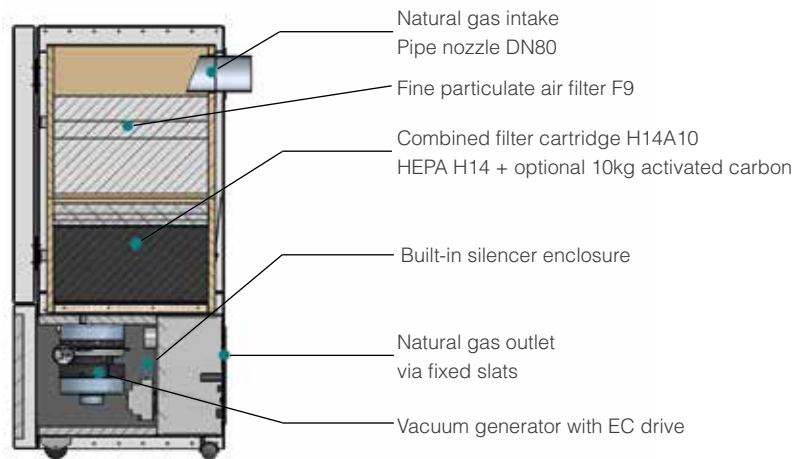
## Features:

- › Variable volume flow control
- › Loaded particulate filter indicator
- › 9-pin Sub-D connector (operation status message, filter indicator and remote I/O)
- › Switch for remote control

## Typical applications:

- › Laser engraving of metal, ceramics, plastics and other organic materials
- › Carbonization of other organic materials
- › Surface cleaning of metal, ceramics, plastics and other organic materials





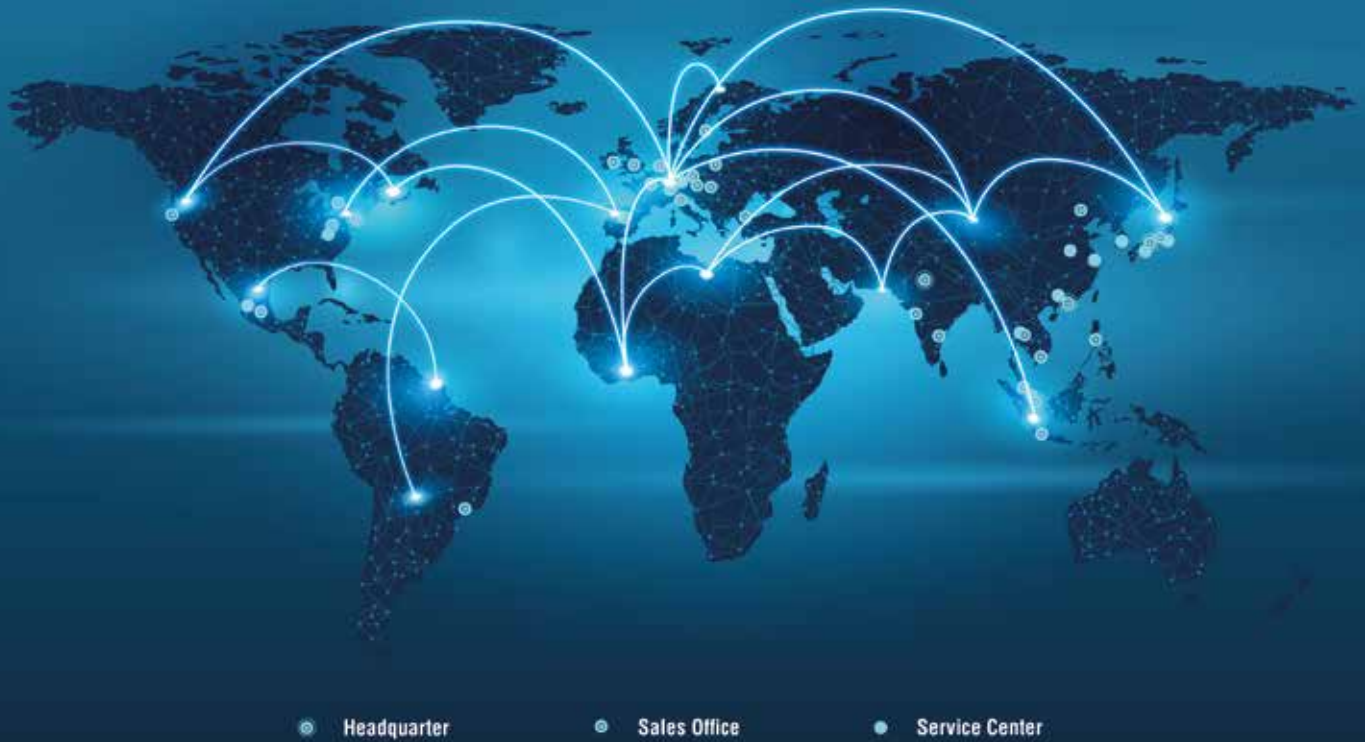
Model LFE-300		
Specifications		Spare part
Flow rate	max. 400m <sup>3</sup> /h	
Nominal flow rate	200m <sup>3</sup> /h at 7500Pa	
Power supply	230V 50/60Hz	
Noise level (at 50–100%)	70dB (A)	
Extraction hose	4m length with a diameter of 50mm	
Dimensions (WxDxH)	460mm x 475mm x 975mm	
Degree of protection	IP 54	
LED display	Loaded particulate filter indicator	
Prefilter	Fine particulate air filter F9 (95%)	LFE-300-F9
Main filter (combined filter)	H14 with activated carbon (99.95%)	LFE-300-ACD
Net weight	approx. 75kg	

## Maintenance & Services for Panasonic lasers systems

To ensure reliable operation with consistent high-quality marking results Panasonic Industry focused on the robustness of the Panasonic Laser Marking Systems. Even in environments with a high exposure of dust or oil mist it is only necessary to clean the lens protection glass with a dry and soft cloth. In order to optimize the running costs and reduce downtime of the laser marker the customer can easily change limited-life parts of the controller like fan filters, the fans itself, the internal battery or the contactor kit. Even changing the lens protection glass on the head unit does not require Panasonic personnel. However, our customers can expect to receive comprehensive support provided by trained experts.

Besides a comprehensive maintenance support Panasonic Industry offers a wide-ranging portfolio of customer support to ensure an optimal and cost-effective usability. Our services start with consultation and feasibility studies, assistance in the set-up phase up to maintenance and troubleshooting. We establish a close relationship with our customers from the pre- to aftersales stage and beyond the product life cycle itself.





## Our service packages

Outstanding service is a matter of course for us. There we offer different services in three different services packages according to your needs.

- › Guaranteed availability of all series specific spare parts during the entire contract period
- › Individual spare parts bundles
- › 48h spare part and replacement system delivery
- › Emergency hotline
- › Firmware update
- › Training for the operators
- › If required: short-term support by Panasonic service technicians

Included service features	Maintenance Service	Replacement Service	Premium Service
Inspection: Visual inspection and a functional test	✓		✓
Preventive maintenance	✓		✓
Firmware update	✓		✓
Recommended actions for operators	✓		✓
Prioritized repair	✓		✓
Replacement system for the duration of the repair period		✓	✓
Prioritized troubleshooting services	✓	✓	✓
Guaranteed availability of all series specific spare parts during the entire contract period			✓
24/48h spare part and replacement system delivery		✓	✓
Series-specific spare part packages			✓
Emergency hotline: advanced technical support until 22:00 CET			✓
10% discount on spare parts for inhouse repairs			✓



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