



MM-L300A - Laser Weld Monitor

New compact monitor for process development and quality control

The MM-L300A laser weld monitor helps to ensure weld quality and maintain high throughput by providing realtime feedback during the laser welding process to ensure weld success. MM-L300A works by detecting and recording a thermal signal from the area of laser interaction during the welding process. The SU-N300A thermal sensor samples the signal and provides an output waveform around which envelope limits can be set.

Key features MM-L300A - Laser Weld Monitor

- > The MM-L300A can detect the following production errors:
 - > Gap between parts
 - > Missing part
 - > Out of focus
 - > Absence of cover gas
- > High temporal resolution (down to 1 μ s) with a dedicated sensor, enables monitoring of both CW and pulsed lasers
- > Envelopes allow real-time comparison and detection of good and bad welds
- > Light weight, compact design reduces set-up space when integrating into production lines
- > Sensor can be mounted either on the optical axis of the laser or off-axis
- > Easy and intuitive operation

Specifications MM-L300A - Laser Weld Monitor

MM-L300A Controller	.
Input power requirements	Single phase, 90 – 250 VAC 50/60 Hz
Interface	15 pin D-sub, Ethernet (RJ-45)
Channel	1
Temporal resolution	Min: 1 μs
Judgement function: Analysis	Waveform
Judgement function: Judgement	Upper and lower limit
Operational temperature range	0 – 40° C (non-condensing)
Operational humidity range	
SU-N300A sensor	.
Monitoring area	Working distance approx. 200 mm, Signal detection diameter - about ø 2 mm
Guide light	Green LED
Monitoring wavelengths	1,300 – 2,500 nm
Operational temperature range	5 – 50°C (non-condensing)
Operational humidity range	
Protection level	IP64 with connector
WEIGHT & DIMENSIONS	
MM-L300A without connector dimensions (LxWxH)	243 mm x 230 mm x 89 mm (9.6 in x 9.1 in x 3.5 in)
MM-L300A without connector weight	3.0 kg (6.6 lb)
Sensor without connector dimensions (LxWxH)	35 mm x 50 mm x 96 mm(1.4 in x 2 in x 3.8 in)
Sensor without connector weight	0.2 kg (0.44 lb)

Product applications MM-L300A - Laser Weld Monitor



Seam weld example

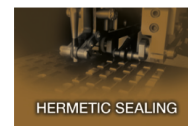


Spot weld example

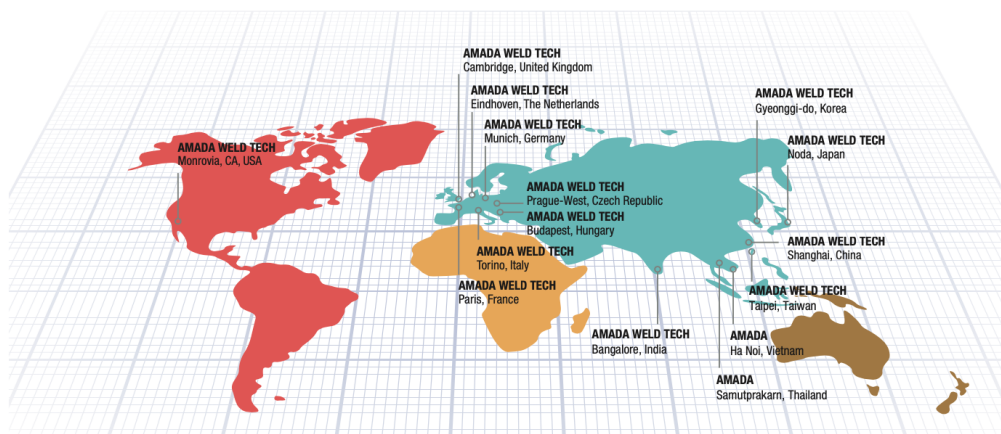
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