

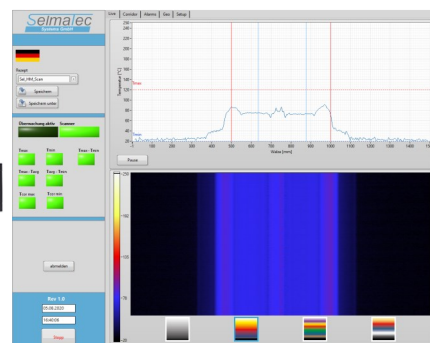


HM-INSPECTOR

DATA SHEET

BENEFITS

- Enables continuous, **full-surface monitoring of hotmelt adhesive applications** by means of wide-slit nozzles or kissrolls
- **System reliably detects anomalies** (e.g. air pockets or accumulations)
- **Zone function** allows influencing any sequential hot melt feeding pumps
- **Use of multiple sensors** for e.g. wider coatings possible
- **High scanning speed** of up to 300 lines per second
- **Variable interfaces** for PLC connection (can also be retrofitted to old systems)



DESCRIPTION / APPLICATION EXAMPLES

The modular **HM-Inspector** system enables reliable, continuous gluing control in the corrugated board industry. Adjustable monitoring sectors allow individual temperature evaluation and alarming of specific areas. This ensures optimized control of the preheaters and glue application units.

The provision of a wide range of industrial interfaces enables easy integration of the system into existing process controls or control systems. By using one or more RAYTEK MP150 / MP300 IR-Line Scanners with an opening angle of aperture angle of 90°, even large web widths can be detected and evaluated or alerted over a wide area in confined spaces.

After one-time pre-configuration, the sensor units operating in self-sufficient multitasking mode can visualize measured values on a built-in panel IPC without any further user input, while the sector results are transferred directly to the plant control system for the necessary control tasks.

MEASUREMENT SPECIFICATIONS

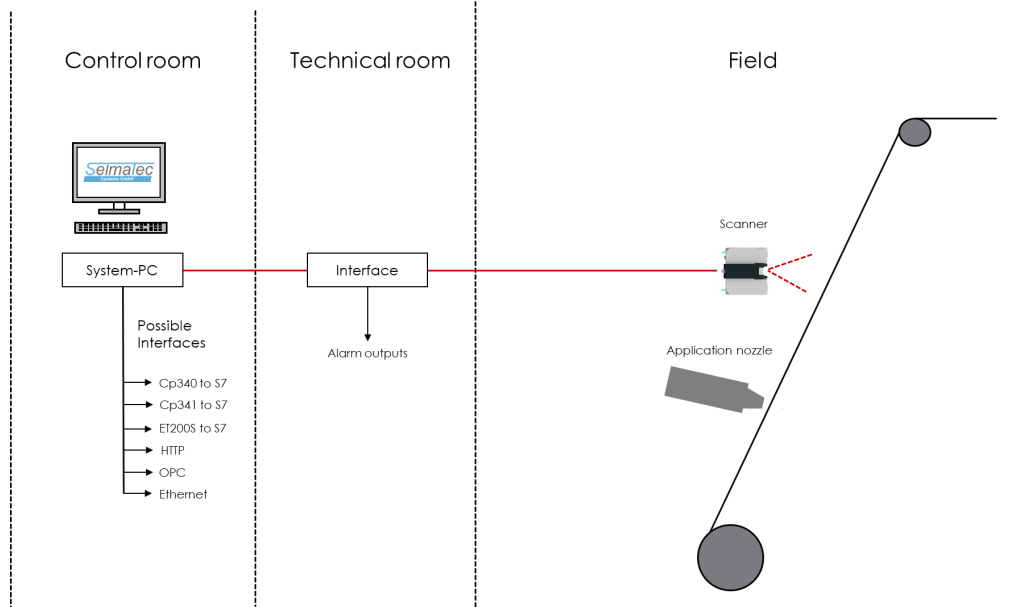
Line Frequency	300 Hz, 150 Hz, 108 Hz, 75 Hz, 48 Hz, 36 Hz, 20 Hz
Scan angle	90° / 45°
Emissivity	0,1 ... 1,0 digital adjustable
Measuring Points	256 ... 1024 measuring points per line (adjustable)
Signal processing	Max-, Min-, Mean, Max- minus Mean value, Measuring points above alarm value, gradient, Standard deviation (adjustable per sector)
Analogue outputs	0/4 ... 20 mA (optional)
Digital outputs (optional)	Relay or solid state relay (optional)
Alarm outputs	4 Relays (changer) Temp.-warning, Temp.-alarm, Watchdog, System error
PLC coupling	OPC, CP340, CP341
Power supply	230 VAC
Scope of delivery	Sensor unit, Interface, System computer incl. Software, Monitor, Documentation

GENERAL PARAMETERS

Protection class	IP65 (IEC 529)
Ambient temperature (Without water cooling) (With water cooling)	0 ... 50 °C Max. 180 °C
Permissible internal device temperature	0 ... 60 °C
Permissible storage temperature	-25 ... 65 °C
Relative humidity	10 ... 90 %, non-condensing
Shock	IEC 68-2-29, 3 axes, 1000 shocks, in operation 5 G, out of service: 2 G
Vibration	IEC 68-2-6, 3 axes, 10 – 150 Hz, in operation: 0,5 G, out of service: 2 G
Mechanical scanning system	MTBF: 40.000 h
Air Purge Unit max. Water pressure max. Air pressure	Standard 5 bar 3 bar
Dimensions (Sensor Unit)	450 x 450 x 450 mm
Weight (Sensor Unit)	Ca. 15 kg, plus mounting

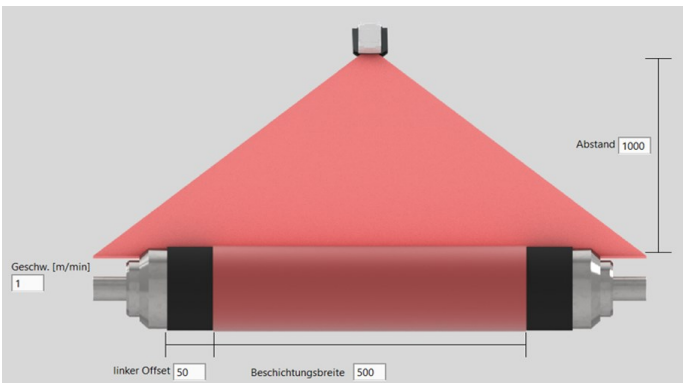
LAYOUT EXAMPLE

- There are a variety of options
- The system is flexible and easily expandable and therefore well adaptable to individual needs

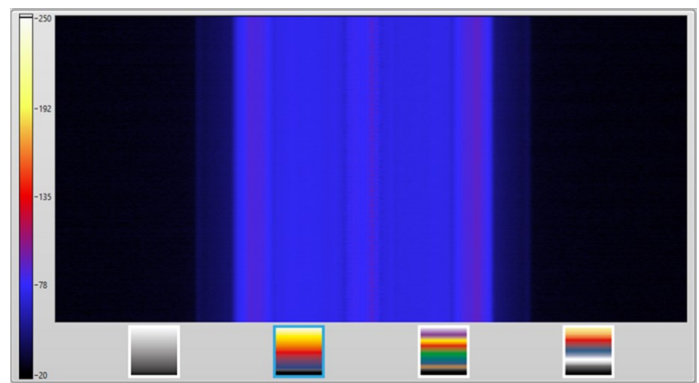


SOFTWARE

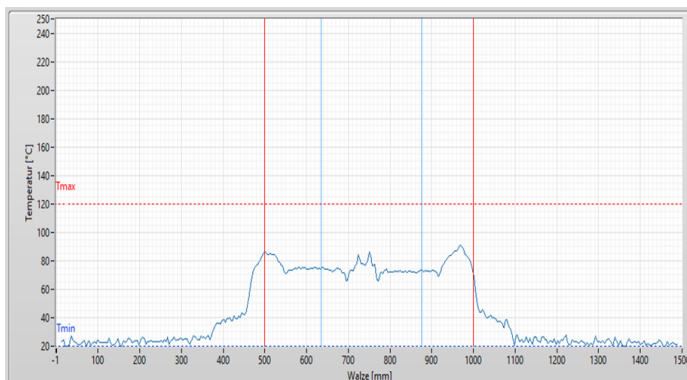
Intuitive setup



Running display



Profile display



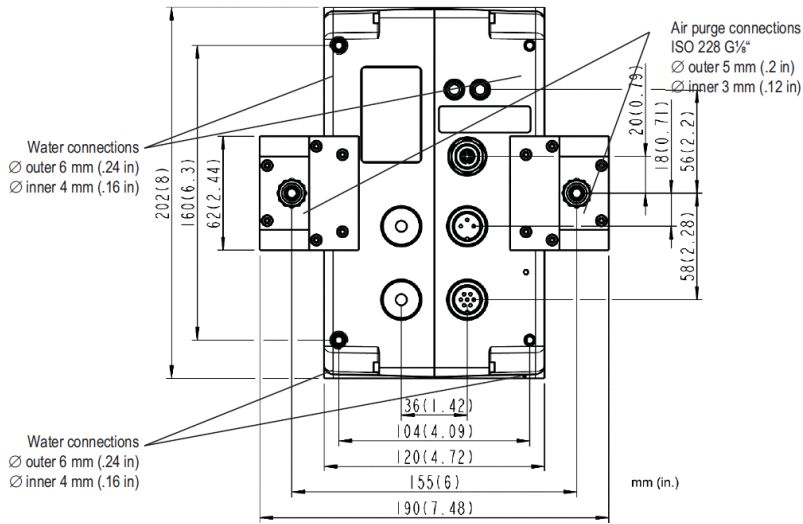
Alarm log

The screenshot shows the alarm log interface with a table of events and monitoring status.

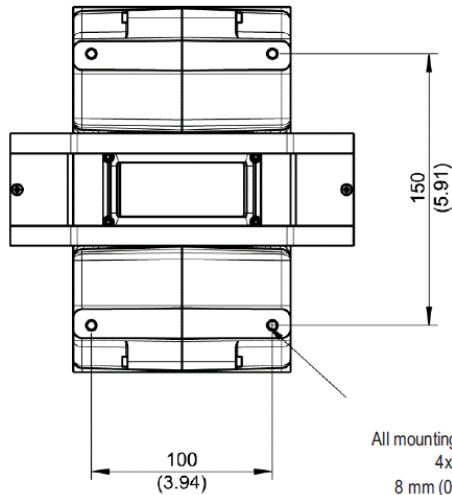
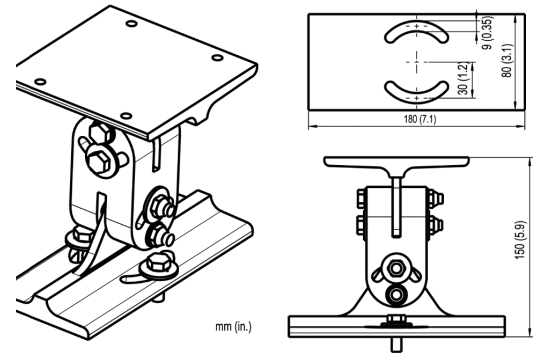
Time	Event	Zone	mm	Max	Temp	Min	Temp	Max-Min	Temp	Aug	Min
04.05.2020 08:13:02	TdymMin alarm off	zone3	513,00 - 933,06	130,02	125,70	11,94	36,91				
04.05.2020 08:13:02	TdymMin alarm on	zone3	513,00 - 933,06	130,02	125,94	11,93	36,55				
04.05.2020 08:12:48	TdymMax alarm off	zone3	513,00 - 933,06	130,31	126,19	34,09	36,84				
04.05.2020 08:12:48	TdymMax alarm on	zone3	513,00 - 933,06	130,31	126,30	34,11	36,06				
04.05.2020 08:12:27	TdymMin alarm off	zone3	513,00 - 933,06	130,70	126,91	31,84	38,48				
04.05.2020 08:12:27	TdymMin alarm on	zone3	513,00 - 933,06	130,71	126,89	31,86	38,02				
04.05.2020 08:12:14	TdymMin alarm off	zone3	513,00 - 933,06	130,93	126,87	34,04	37,46				
04.05.2020 08:12:14	TdymMin alarm on	zone3	513,00 - 933,06	130,84	126,53	34,03	34,50				
04.05.2020 08:11:01	TdymMin alarm off	zone3	513,00 - 933,06	131,93	127,89	31,83	34,43				
04.05.2020 08:11:01	TdymMin alarm on	zone3	513,00 - 933,06	131,93	127,80	31,83	34,82				

Below the table, there are monitoring status indicators for 'scanners' with 'Tmax', 'Tmin', 'Tmax-Tmin', 'Temp', 'Temp-Tmin', 'Tmax-Temp', and 'Error max', 'Error min' buttons.

DIMENSIONS



Adjustable mounting foot



All mounting threads are
 4x M6
 8 mm (0.31) deep
 (front side, upside, below)

