

D93a



D93a Acoustic Emission System

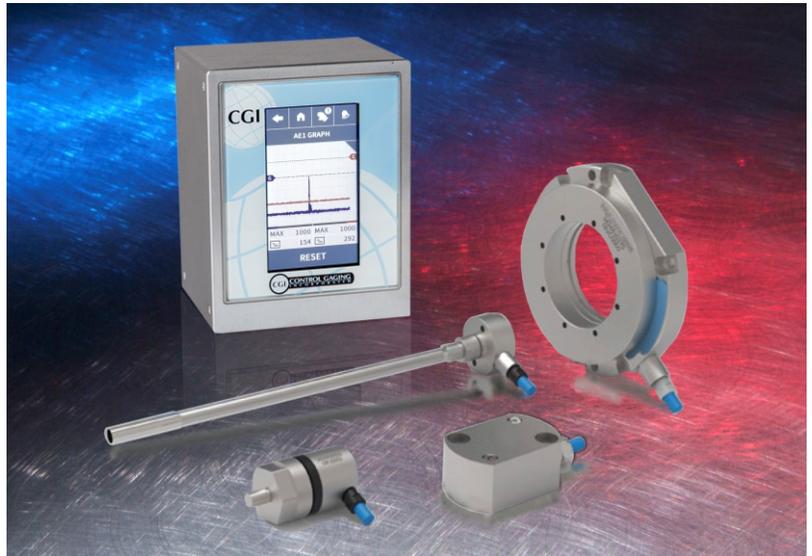
Acoustic emission monitoring can be used to minimize critical machine damage due to accidental collision AND/OR used to improve the dressing process, greatly increasing wheel life

The D93a system uses acoustic emission sensor technology to monitor the machine's audio frequency levels during the grinding process or dressing cycle. This cost efficient solution uses one or two strategically mounted AE sensors interfaced with a 4.3" HMI touch screen controller to allow flexible set up and monitoring.

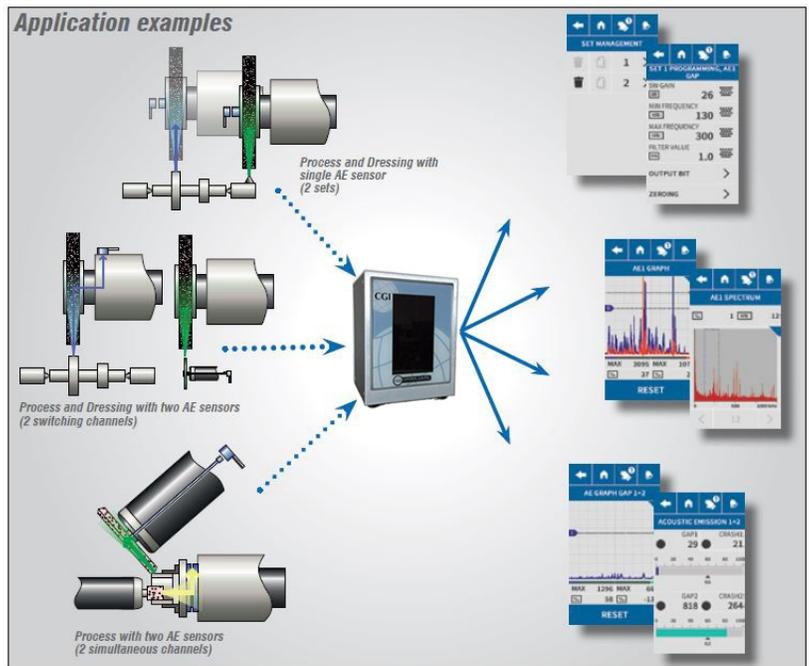
During the grinding process, the D93a system can be used to signal the machine for a wheel retract in a crash condition or signal the machine to transition from a high in-feed rate to a lower in-feed rate as the grinding wheel approaches the part.

During the dressing cycle, the D93a system will indicate the complete dress of the wheel, allowing for smaller incremental moves and elimination of costly overdressing.

The D93a system plots the AE signal in real time so the operator can see a visual representation of the grinding wheel condition.



- Air Gap Elimination
- Dressing Process Monitoring
- FFT Monitoring of Acoustic Emissions
- Collision Monitoring with "Fast Stop" Feature
- Operation is simple and automatic



Typical Acoustic Emission Monitoring Applications

TAKE CONTROL & SAVE MONEY

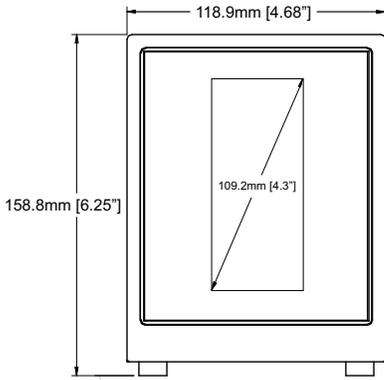
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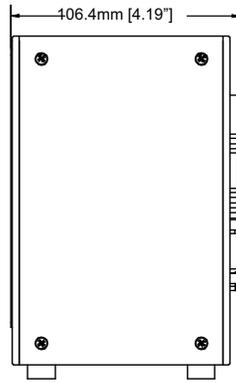
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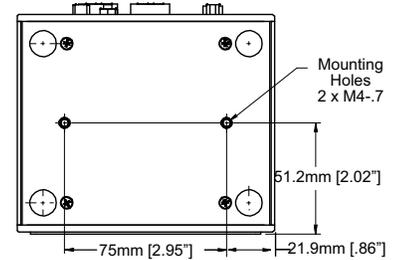
D93a Stand Alone Chassis Ref Drawing 905350



Front View

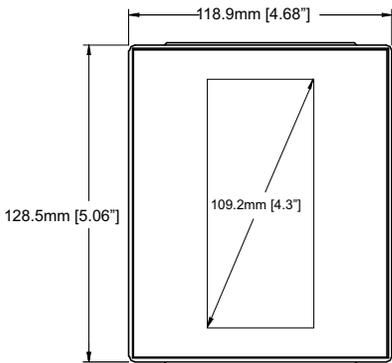


Side View

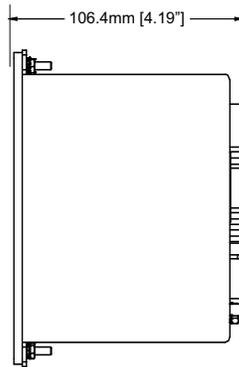


Bottom View

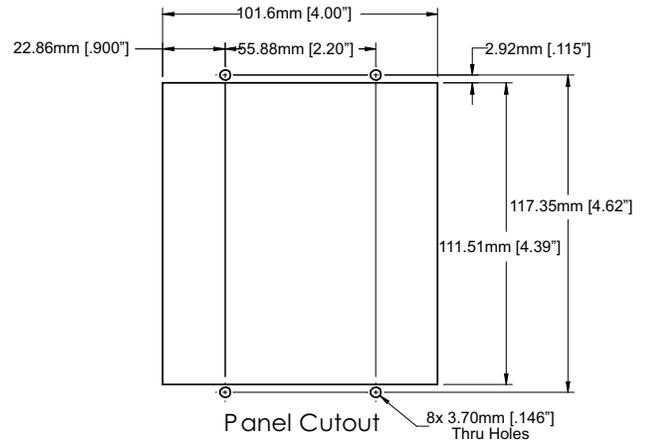
D93a Panel Mount Chassis Ref Drawing 905350



Front View



Side View



Panel Cutout

D93a Specifications

CHASSIS STYLES	<ul style="list-style-type: none"> • Stand-Alone • Rack Mount • Remote panel
DISPLAY	4.3" (480 x 272) Capacitive LCD
FUNCTIONS	<ul style="list-style-type: none"> • Gap and Crash Monitoring • FFT analyses
POWER IN	24VDC (-15% / 20% with 5% ripple)
POWER CONSUMPTION	10W

MACHINE I/O SIGNALS	<ul style="list-style-type: none"> • 24V DC, Sink or Source • Input current 9 mA • Output current 50mA (max)
PROTECTION DEGREE IEC 60529	IP54 (only front panel)
OPERATING TEMPERATURE	41° to 113°F (5° to 45°C)
ELECTRICAL SAFETY STANDARDS	EN 61010-1
EMC STANDARDS	EN 61326-1

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