



BLD48

Boiler Tube Leak Detection System



PRODUCT OVERVIEW

The Digital Boiler Tube Leak Detection System is a high-precision, intelligent solution designed for the early detection of leaks in boiler pressure parts, including water walls, superheaters, reheaters, and economizers. By utilizing advanced acoustic analysis, the system continuously monitors in-furnace noise to distinguish between normal operational sounds (such as soot blowing) and the distinct high-frequency signatures of tube leaks. It provides early warning to prevent unplanned shutdowns in thermal power units, ensuring safety, reliability, and operational efficiency.

HIGHLIGHTS



Lossless Audio Fidelity



Fully Digital & Anti-Interference



Mobile-Optimized Operation



AI-Powered Leak Identification



3D Visualization



Robust & Easy Maintenance

PRODUCT MODEL



BLD-S01



BLD-MCC

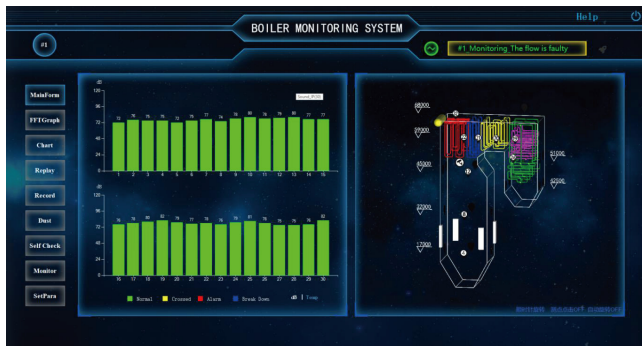


BLD-LCC01

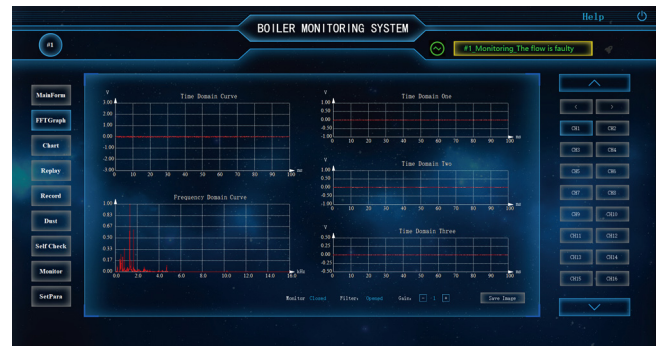


BLD-LCC02

TYPICAL HMI



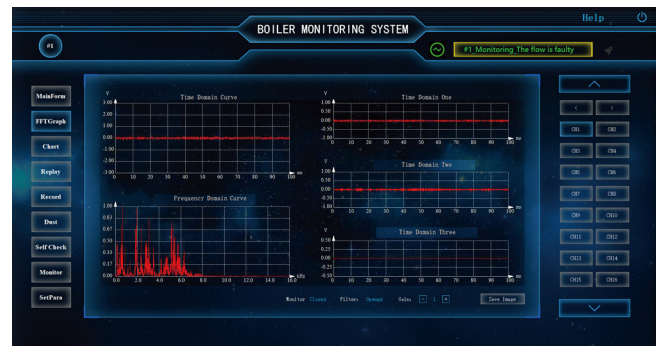
System Main Interface



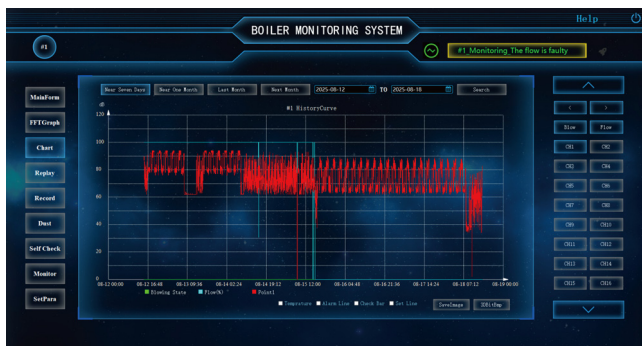
Spectrum Analysis



Spextrun of Sound Without Leakage



Spextrum of Sound When Leakage Starts

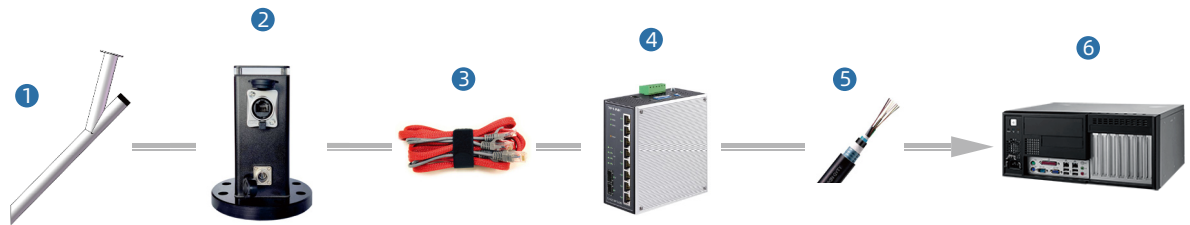


Historical Curve



Channel Self-check

I SYSTEM DIAGRAM



① Acoustic ducts

② Digital acoustic wave sensors

③ Network cables

④ Optical switches

⑤ Optical fibers

⑥ Industrial control computers

I APPLICATION



I SPECIFICATIONS

BLD-S01	Transducers	44.1kHz or higher
	Sensitivity	50 mV/Pa
	Frequency Response Range	20Hz-20kHz
	Power Supply	48V
	Interface	RJ45
	Output	Digital signal
	Compatibility	Shielded twisted-pair (CAT6) connection
	Wireless Support	Bluetooth transmission
BLD-MCC	Size	2200(H)X800(W)X600(D)mm
	Material	Mild Steel
	Finish	Powder Coated
	Color Code	RAL 7035
BLD-LCC01	Power Input	100-240VAC, 50/60Hz
	Size	500(H)X400(W)X210(D)mm
	Material	304SS
	Finish	Brushed
	Protection Rating	IP65
BLD-LCC02	Power Input	100-240VAC, 50/60Hz
	Size	300(H)X380(W)X210(D)mm
	Material	304SS
	Finish	Brushed
	Protection Rating	IP65



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