

PATLITE®



Improve your
processes with wireless
signal tower monitoring

Intelligent, cost-efficient
alternative to complex
industrial network systems

WD-Z2

Wireless Data Acquisition System



SIGNAL TOWER



WD-Z2 TRANSMITTER



WIRELESS TRANSMISSION

IIoT, Industrial Internet of Things, a term that has become more than just a buzzword but a way of the future.

IIoT provides businesses with the ability to access and monitor plant-wide manufacturing data for operational visibility, predictive maintenance and interconnectivity among machines, components and people. This achieves Kaizen, enabling businesses to continuously improve their processes and quickly solve problems as they arise.

The WD system is a revolutionary, low cost, IIoT add-on allowing PATLITE Signal Towers to transmit wireless operational data based on its physical, visual and audible alerts system. Seamlessly acquire and view real-time machine data, irrespective of the age or type of machine, to prompt immediate responses from operators.

Predicting maintenance, identifying bottlenecks and increasing OEE (Overall Equipment Effectiveness) on the factory floor is now simpler than ever.



**WDT-Z2
TRANSMITTER**

CASE STUDY 1

BEFORE

Production bottlenecks caused by machine down time and uneven production flow are surmounting. To address this issue, we are manually creating daily machine reports which are tedious and inaccurate.

AFTER

The WD system enables us to monitor our line in real-time, quickly identify bottlenecks and address them. We can also determine the severity of machine issues for more effective predictive maintenance.



CASE STUDY 2

BEFORE

We operate several manufacturing facilities in different locations and have no system in place to remotely monitor machines in real-time. Our goal is to share productivity among our facilities to improve company wide productivity.

AFTER

The WD system allows us to monitor all lines in all locations remotely and in real-time. Workers are able to better understand how their efforts affect the bigger picture improving company wide productivity.



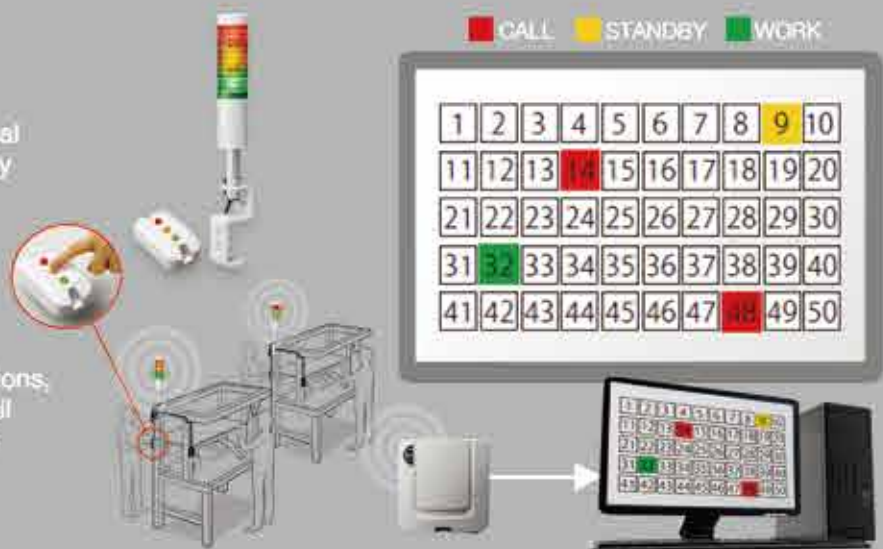
CASE STUDY 3

BEFORE

Maintenance calls from our manual assembly stations are only visually displayed on signal towers. When a supervisor is away from their station or site, delays and production bottlenecks occur.

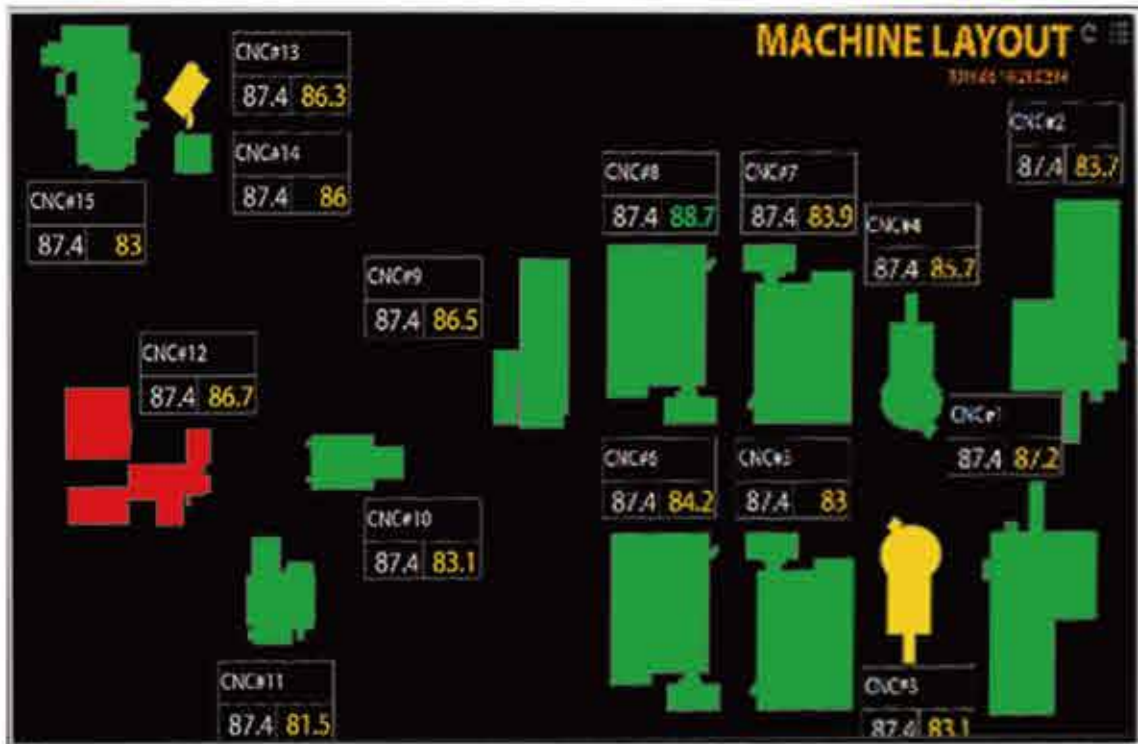
AFTER

With the WD installed in workstations, supervisors can now receive email alerts for maintenance calls when away from the site, greatly reducing bottlenecks.



Features

Machine Status is at a glance.



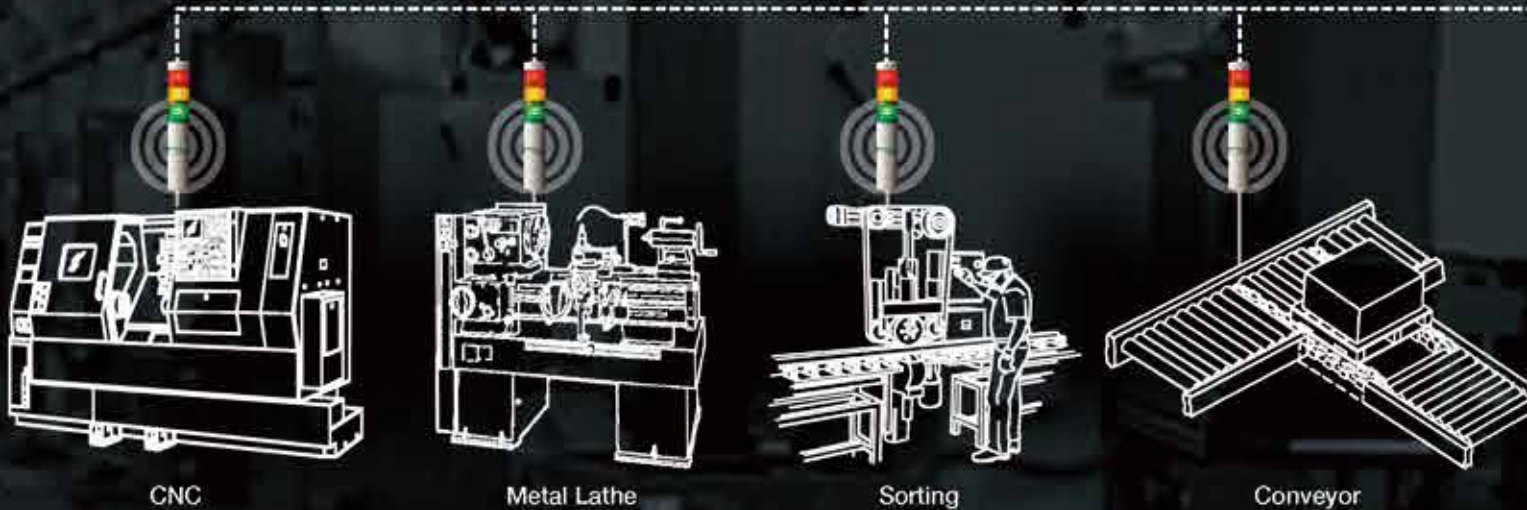
Recording production history automatically and precisely.



The above images show the sample screens of monitoring software offered for sales by our system integrator partners.

Network-enable your machines

WD Transmitters easily attach to compatible PATLITE Signal Towers and enables wireless data transmissions to a WD Receiver



Wireless Communications System

ROUTING FUNCTION AUTOMATICALLY SELECTS OPTIMUM COMMUNICATION ROUTE

Multi-hop mesh networking allows the WD system to adapt to various environmental conditions when transmitting data by selecting the best route for radio wave communications. Even if the floor layout of the equipment is altered, data communications will resume normally.

ZIGBEE WIRELESS 2.4GHz MESH NETWORKING FOR ACCURATE AND RELIABLE COMMUNICATIONS

The WD system does not require complicated wireless or network settings. The system automatically and continuously selects the best routes to send data through to ensure stable data transmission.





Manual Workstations

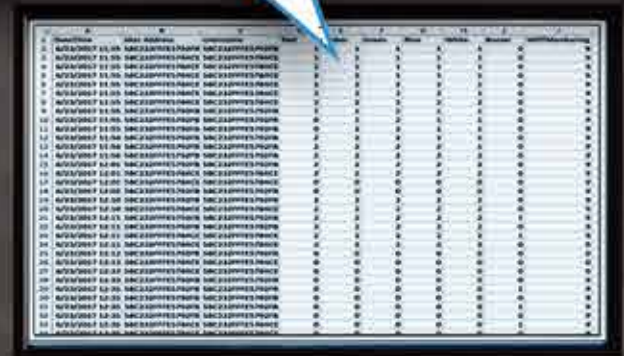
Receiver WDR-LE-Z2



Wireless Data Transmission

Ethernet (LAN) or USB

	A	B	C	D	E	F	G	H	I	J
1	DateTime	Mac Address	Username	Red	Ambel	Green	Blue	White	Buzzer	WDTMonitoring
2	6/23/2017 11:55	58C232FFFE5792FB	58C232FFFE5792FB	1	1	1	1	1	0	9
3	6/23/2017 11:55	58C232FFFE5784CE	58C232FFFE5784CE	1	1	1	1	1	0	9
4	6/23/2017 11:55	58C232FFFE5784CE	58C232FFFE5784CE	2	1	1	1	1	0	9
5	6/23/2017 11:55	58C232FFFE5784CE	58C232FFFE5784CE	2	2	1	1	1	0	9



CSV data can be easily manipulated for various calculations and charts

WDS-WIN01 Monitoring Software



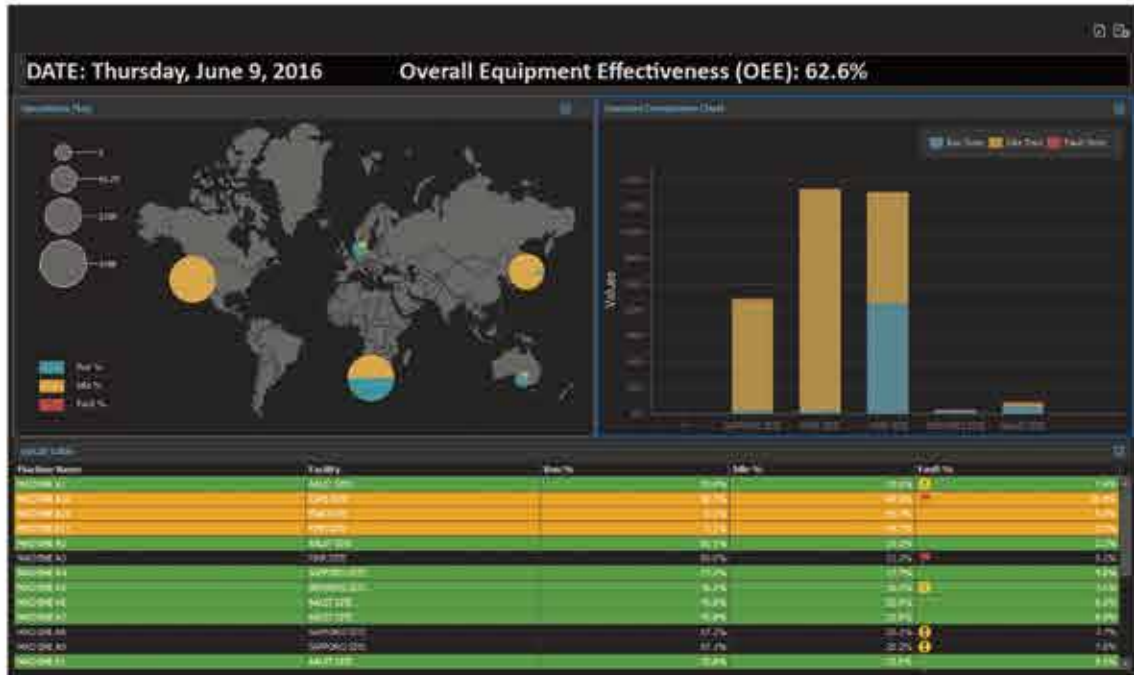
WDS-WIN01 Included Software

MAKES IT EASY TO SETUP WIRELESS COMMUNICATIONS WITH SIGNAL TOWERS ON THE PLANT FLOOR

- User-friendly software interface for easy operability
- Allows users to acquire equipment data from remote locations
- CSV data logger (license required)

Features

**Overall Equipment Effectiveness
can easily be monitored.**

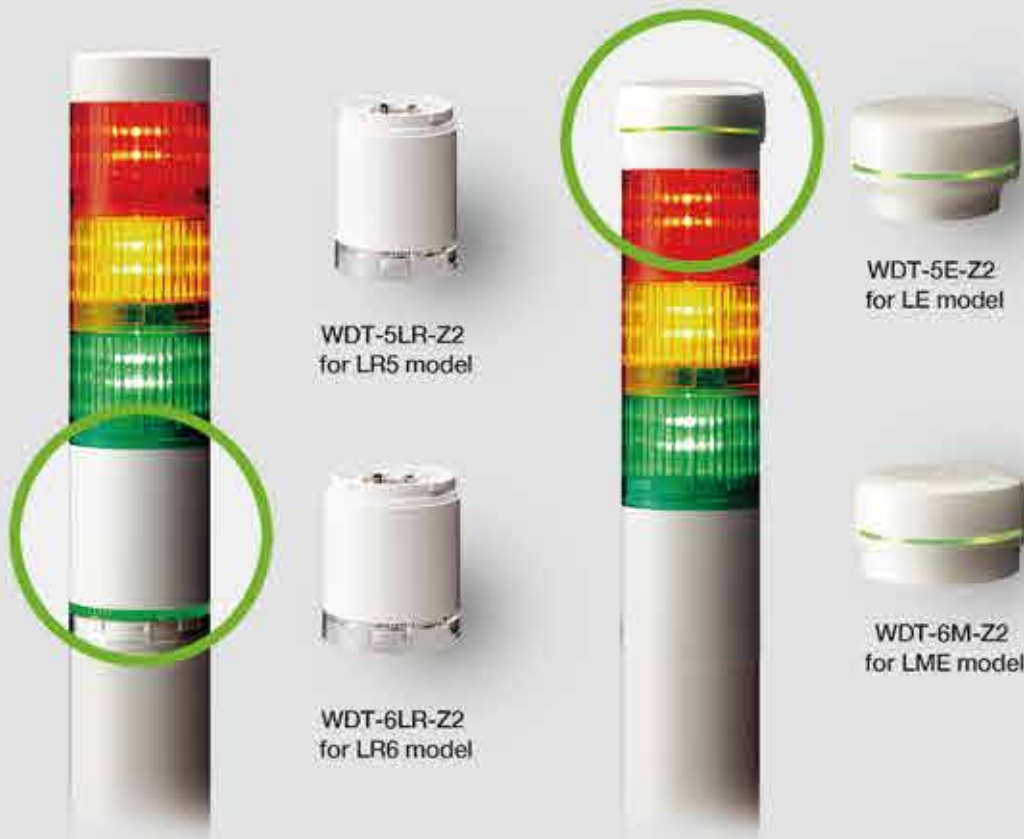


Regional performance at a glance



The above images show the sample screens of monitoring software offered for sales by our system integrator partners.

Transmitter for Signal Tower



Receiver



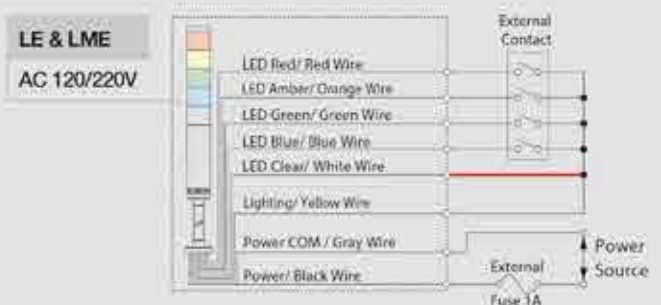
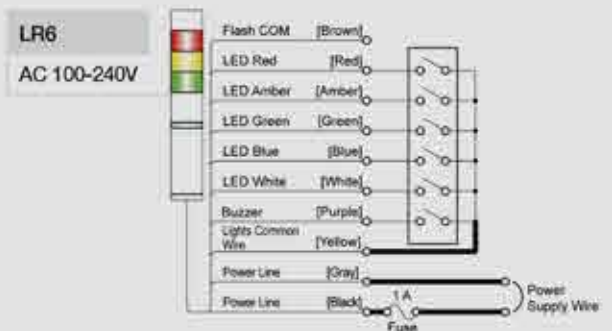
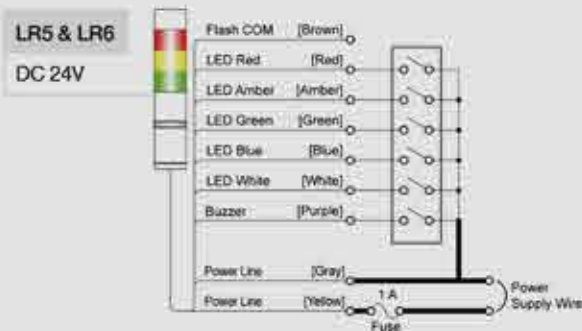
WDR-LE-Z2

AC Adaptor



Model: ADP-001

Wiring Diagrams for Signal Towers and Transmitters



PATLITE

PATLITE (SINGAPORE) PTE LTD

No.2 Leng Kee Road, #05-01 Thye Hong Centre, Singapore 159086

TEL: 65-6226-1111 FAX: 65-6324-1411 E-MAIL: sales@patlite.com.sg