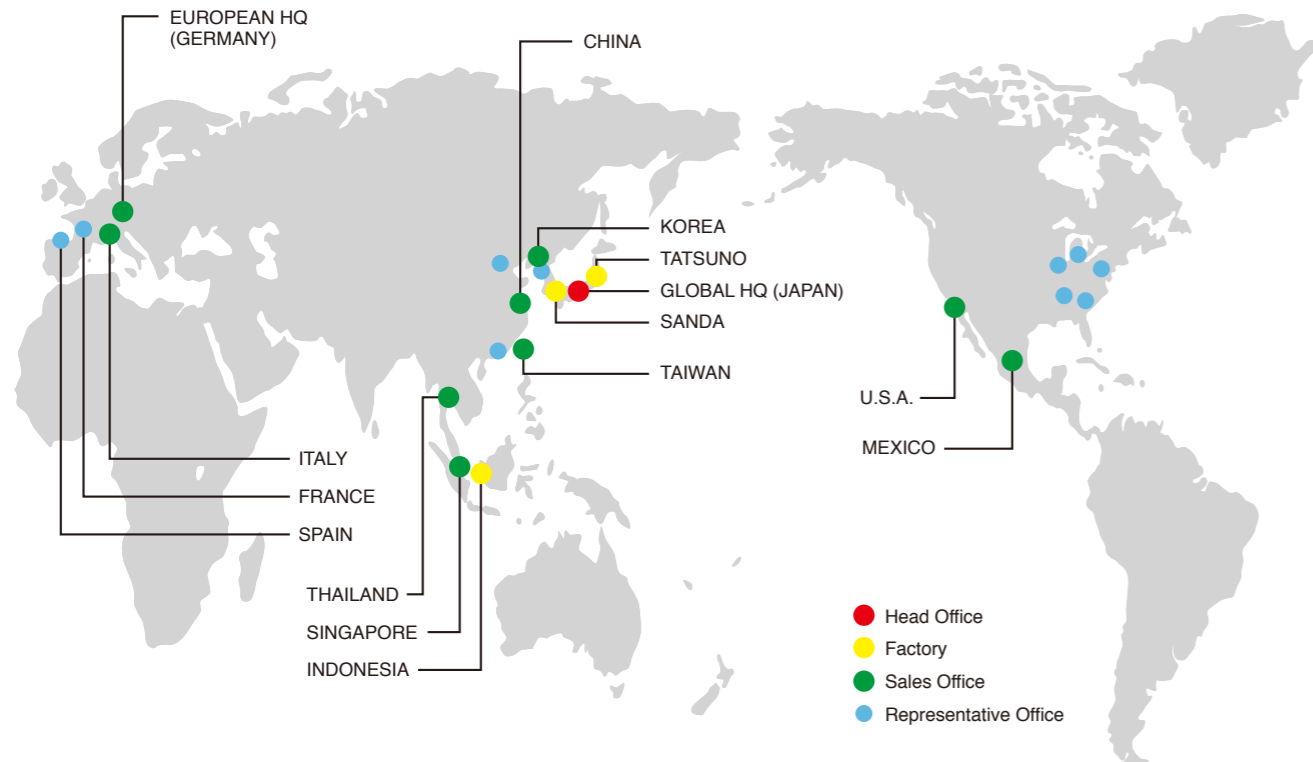


## PATLITE Global Network



### PATLITE Corporation

4-1-3, Kyutaromachi, Chuo-ku, Osaka 541-0056 Japan  
International Sales Division  
TEL.+81-6-7711-8953 FAX.+81-6-7711-8961 E-mail: overseas@patlite.co.jp

### PATLITE (U.S.A.) Corporation

20130 S. Western Ave. Torrance, CA 90501, U.S.A.  
TEL.+1-310-328-3222 FAX.+1-310-328-2676 E-mail: sales@patlite.com

### 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

### PATLITE (CHINA) Corporation

Room 1102-1103, No.55, Lane 777, Guangzhong Road (West), Zhabei District, Shanghai, China 200072  
TEL.+86-21-6630-8969 FAX.+86-21-6630-8938 E-mail: sales@patlite.cn

### PATLITE Europe GmbH

Am Soeldnermoos 8, D-85399 Hallbergmoos, Germany  
TEL.+49-811-9981-9770-0 FAX.+49-811-9981-9770-90 E-mail: info@patlite.eu

### PATLITE KOREA CO., LTD.

A-2603, Daesung D-POLIS, 606, Seobusaet-gil, Geumcheon-gu, Seoul, 08504, Korea  
TEL.+82-2-523-6636 FAX.+82-2-861-9919 E-mail: sales@patlite.co.kr

### PATLITE TAIWAN CO., LTD.

2F-1, No.215, Sec. 2, Chengde Rd., Datong Dist., Taipei City 10364, Taiwan (R.O.C.)  
TEL.+886-2-2555-1611 FAX.+886-2-2555-1621 E-mail: info@patlite.tw

### PATLITE (THAILAND) CO., LTD.

Olympia Thai Tower, 15th Floor 444 Ratchadapisek Road Samsenok, Huay Kwang Bangkok 10310, Thailand  
TEL.+66-2-541-5431 FAX.+66-2-541-5429 E-mail: sales\_150716@patlite.co.th

### PATLITE MEXICO S.A. de C.V.

Plaza de La Paz No. 102, int. 712 Guanajuato Puerto Interior, Silao, Gto, C.P.36275, Mexico  
TEL.+52-472-748-9124 E-mail: ventas@patlite.com.mx

[www.patlite.com](http://www.patlite.com)

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# PATLITE®

Wireless Data Acquisition System  
WD PRO

New

## Smarter Remote Monitoring and Control

Gather and analyze more data in real-time to make smarter, data-driven decisions



### Effective Local Status Indication

Reliable visual and audible signals with a built-in counting feature

### Visualize More Data Points

Equipped with 8 contact inputs enabling acquisition of up to 255 data codes

### Acquire Additional Levels of Information

Features a serial communication interface to attach devices, such as a barcode reader

### Improve Work Efficiency

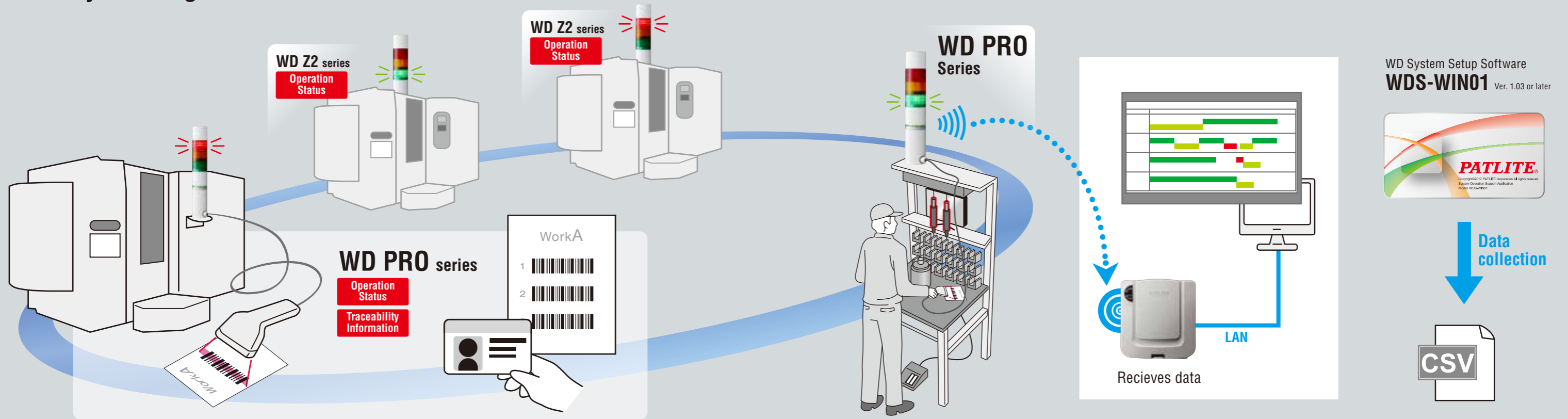
Features 2-way wireless communication to remotely trigger tower light signals

#### CAUTION

To ensure correct use of these products, read the "Instruction Manual" prior to use. Failure to follow all safeguards can result in fire, electric shock, or other accidents. Specifications are subject to change without notice.

O-AI05 EN 1906 A

# The WD Pro adds a myriad of additional features to any existing WD Series network.



## Wireless Data Acquisition System WD PRO series

**WD PRO Transmitter  
WDT-6LR-Z2-PRO**

Compatible base unit  
**WD PRO series**

Current consumption **MAX 110mA** (Total value of transmitter and base unit)

Radio wave reaching distance without obstacles  
**20m** \*3

\*To be installed on the WDB-D80S-PRO base unit. (not compatible with the LR6 body unit)

**Contact Input -  
Serial Communication Base Unit  
WDB-D80S-PRO**

**Input  
Serial base unit**

Transmitter  
**Transmitter for WD PRO**

**WD PRO Transmitter  
WDT-6LR-Z2-PRO**

Contact Input -  
Serial Communication Base Unit  
**WDB-D80S-PRO**

## Wireless Data Acquisition System WD-Z2 series

### Transmitter

Transmitter for LR6/LR5 \*Not compatible with WD PRO Series

**Transmitter for  
the LR6 signal light  
WDT-6LR-Z2**

Compatible signal light model  
**LR6 series** \*1

Current consumption  
**MAX 55mA**

Radio wave reaching distance without obstacles  
**20m** \*3

**Transmitter for  
the LR5 signal light  
WDT-5LR-Z2**

Compatible signal light model  
**LR5 series** \*1

Current consumption  
**MAX 55mA**

Radio wave reaching distance without obstacles  
**20m** \*3

### Receiving machine

**Receiver WDR-LE-Z2**

Recommended number of connected transmitters  
**20 Max. 30** \*2

Connection method **LAN/USB**

Current consumption **typ. 65mA**

**Multiple receivers can operate at the same time.** \*4

\*1: There are some restrictions on compatible signal lights, so please contact Patlite for details. \*2: Due to the properties of radio waves, this number may differ according to the location of the receiver, the communication environment, and the communication frequency. \*3: This is a reference value. The actual value may differ due to the properties of radio waves. \*4: Multiple receivers cannot operate at the same time if a USB connection is used. (Contact Patlite for details.)

# More Data Means Smarter Decision-Making

The WD PRO Series features 2-way wireless communication for better plant-wide visibility while enabling you to gather more data points for better predictive maintenance, quicker problem resolution, and OEE improvement.

## Understand the cause of equipment shutdown

8 points of contact input

Up to 765 data codes can be acquired to identify exact cause and timing of equipment malfunctions.

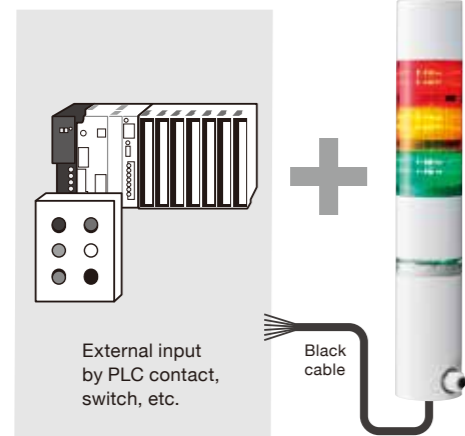
### Error code table

Signal tower Information 3 points × External contact input 8 points → **765 factor data can be acquired**  
\*When using 3 segment signal tower

| Decimal number | Contact input (ON - ● OFF - ○) |   |   |   |   |   |   |   |
|----------------|--------------------------------|---|---|---|---|---|---|---|
|                | ①                              | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ |
| 1              | ●                              | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 2              | ○                              | ● | ○ | ○ | ○ | ○ | ○ | ○ |
| 3              | ○                              | ○ | ● | ○ | ○ | ○ | ○ | ○ |
| 253            | ●                              | ○ | ● | ● | ● | ● | ● | ● |
| 254            | ○                              | ● | ● | ● | ● | ● | ● | ● |
| 255            | ●                              | ● | ● | ● | ● | ● | ● | ● |

Equipment operation status × Detailed information → **Detailed data of equipment operation / non-operation**

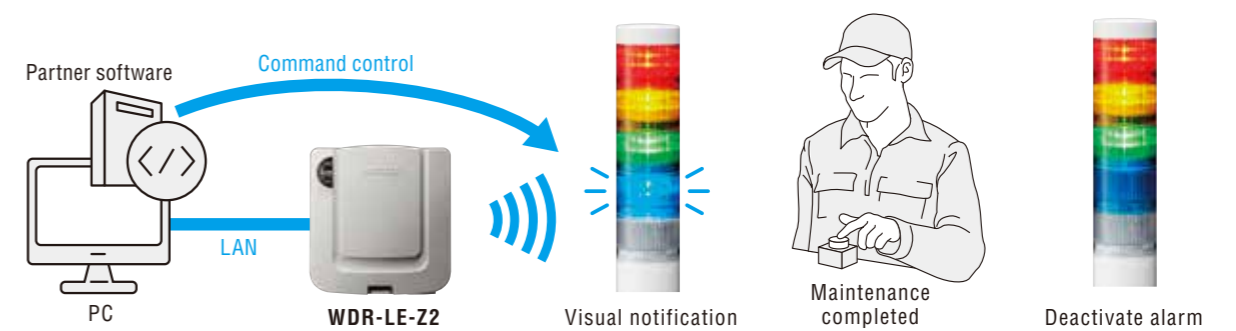
### Cause-based Pareto analysis



## Eliminate downtime

Remote Signaling

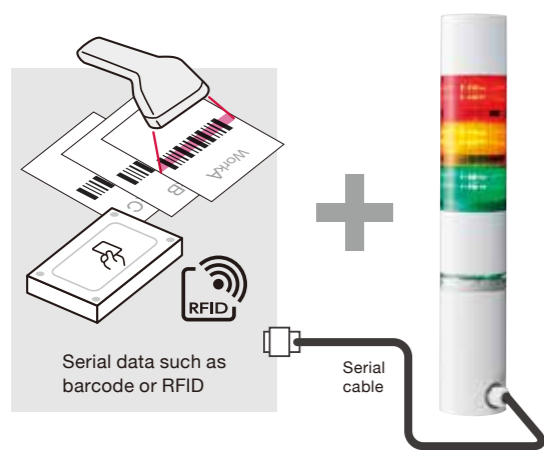
Notifies remote operators instantly of equipment abnormalities, as well as the type of maintenance required.



## Acquire additional levels of information

Serial Cable

Connect a bar code reader to the WD PRO to trace employee data for greater control over products and process quality.



Worker ID input by barcode

| 20XX.00.00       | SMITH | 8      | 9     | 10   | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|------------------|-------|--------|-------|------|----|----|----|----|----|----|----|----|----|----|
| Unit 01 (total)  |       |        |       |      |    |    |    |    |    |    |    |    |    |    |
| Unit 01 (actual) | 77340 | 78.43% | 16560 | 4600 |    |    |    |    |    |    |    |    |    |    |
| Unit 01 (earned) |       |        |       |      |    |    |    |    |    |    |    |    |    |    |
| Unit 02          |       |        |       |      |    |    |    |    |    |    |    |    |    |    |

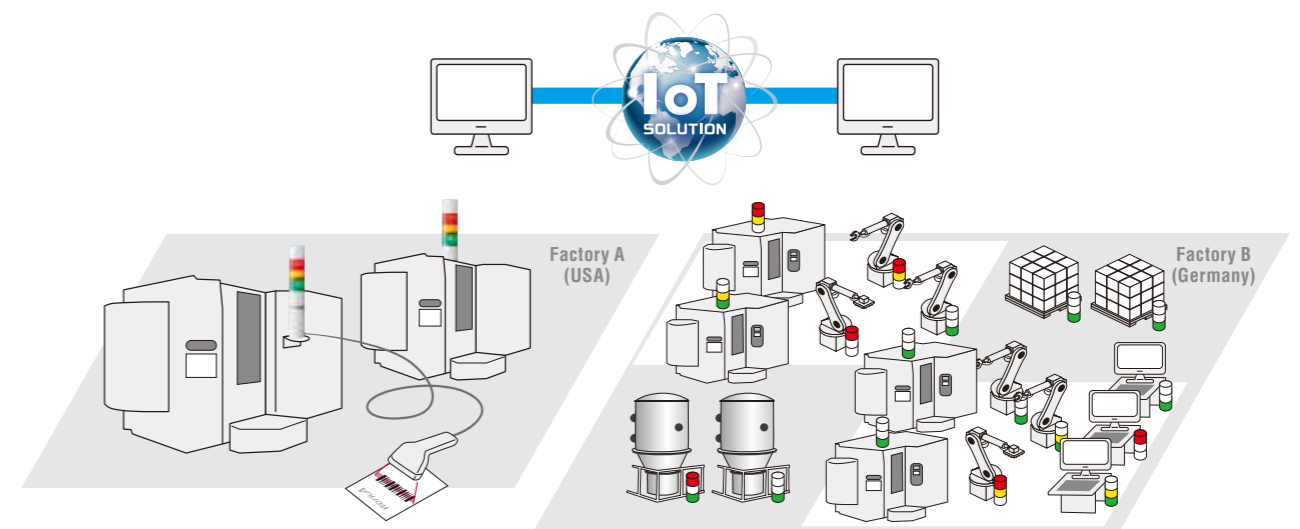
Legend: workA (dark blue), workB (medium blue), workC (light blue)

Equipment operation data by WD, Item number input by barcode, Production planning

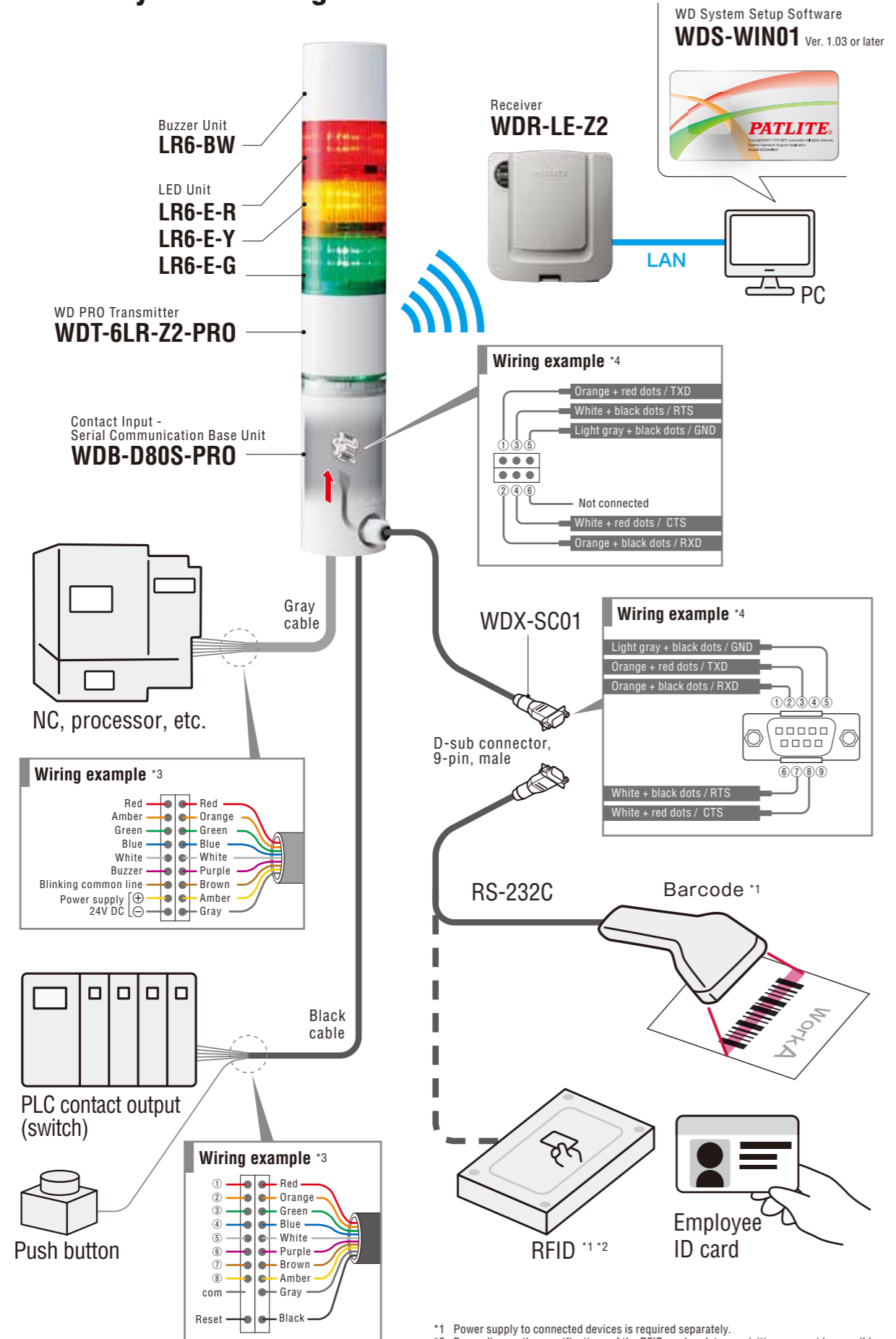
## Monitor multiple facilities remotely and in real-time

Supported areas (as of June 2019) | WD-Z2: 41 countries | WD PRO: USA, China, EU, and Japan

Utilize compatible software to monitor multiple factories located across the globe.



# WD PRO System Configuration



\*1 Power supply to connected devices is required separately.  
 \*2 Depending on the specifications of the RFID reader, data acquisition may not be possible.  
 \*3 Please check the instruction manual for wiring instructions.  
 \*4 For pin assignment when using a serial cable, refer to its corresponding instructions manual.

# WDS-WIN01 CSV Output Sample

Ver. 1.03 or later

| Date Time       | MAC address      | user name | Red information | Amber information | Green information | WDT Surveillance intelligence | RS-232C data (ASCII code) | External input information (Decimal number) | Clear input information |
|-----------------|------------------|-----------|-----------------|-------------------|-------------------|-------------------------------|---------------------------|---|-------------------------|
| 2019/3/15 9:44  | 6CE4DAFFFE019925 | machine 1 | 0               | 0                 | 0                 | 9                             |                           | 0   | 0                       |
| 2019/3/15 9:44  | 6CE4DAFFFE019925 | machine 1 | 0               | 0                 | 1                 | 9                             | 012035 SMITH              | 0   | 0                       |
| 2019/3/15 9:44  | 6CE4DAFFFE019925 | machine 1 | 0               | 0                 | 1                 | 9                             | 20190315 AANKBB 200pc     | 0   | 0                       |
| 2019/3/15 9:52  | 6CE4DAFFFE019925 | machine 1 | 1               | 0                 | 0                 | 9                             |                           | 0   | 0                       |
| 2019/3/15 9:52  | 6CE4DAFFFE019925 | machine 1 | 1               | 0                 | 0                 | 9                             |                           | 155   | 0                       |
| 2019/3/15 10:15 | 6CE4DAFFFE019925 | machine 1 | 0               | 0                 | 1                 | 9                             |                           | 0   | 0                       |
| 2019/3/15 10:15 | 6CE4DAFFFE019925 | machine 1 | 0               | 1                 | 0                 | 9                             |                           | 0   | 0                       |
| 2019/3/15 10:20 | 6CE4DAFFFE019925 | machine 1 | 0               | 1                 | 0                 | 9                             | MATERIAL SHORTAGE         | 0   | 0                       |
| 2019/3/15 10:25 | 6CE4DAFFFE019925 | machine 1 | 0               | 0                 | 1                 | 9                             |                           | 0   | 0                       |
| 2019/3/15 11:05 | 6CE4DAFFFE019925 | machine 1 | 0               | 1                 | 0                 | 9                             |                           | 0   | 0                       |
| 2019/3/15 11:05 | 6CE4DAFFFE019925 | machine 1 | 0               | 1                 | 0                 | 9                             | END                       | 0   | 0                       |
| 2019/3/15 11:06 | 6CE4DAFFFE019925 | machine 1 | 0               | 0                 | 0                 | 9                             |                           | 0   | 0                       |
| 2019/3/15 13:05 | 6CE4DAFFFE019925 | machine 1 | 0               | 1                 | 0                 | 9                             | 20190315 CCNKDD 300pc     | 0   | 0                       |

**Data sample**

① Signal Tower information (6 inputs = Red, yellow, green, blue, white, buzzer)    ③ Serial data (RS-232C = ASCII code) 2-10-16 can be selected by setting.  
 ② External configuration information (8 inputs = Binary 0 to 255)    ④ Reset input information

# Specifications

| Model code             | WD PRO Transmitter<br><b>WDT-6LR-Z2-PRO</b> | Contact Input - Serial Communication Base Unit<br><b>WDB-D80S-PRO</b>  |
|------------------------|---|--|
| Rated Voltage          | DC 24V                                      |  |
| Size                   | Φ60   |  |
| Protection Rating      | IP65  |  |
| External Contact Input | —   | Signal tower inputs (red, yellow, green, blue, white, buzzer);<br>8 external contact inputs; 1 reset input; serial communication input |
| Wireless specification | 2.4GHz Zigbee                               | —  |
| Corresponding receiver | WDR-LE-Z2                                   | —  |

# Options

- Serial Cable** WDX-SC01
- Buzzer Unit** LR6-BW
- Upper Bracket** SZP-004W
- Solid Color** LR6-E-R/Y/G/B/C
- Clear Globe** LR6-E-RZ/YZ/GZ/BZ
- Pole Bracket** SZ-016A
- Wall mount Bracket** SZK-003W
- Pole** POLE-800A21 800mm, POLE-300A21 300mm, POLE-100A21 100mm
- Other options:** SZ-010, SZK-001U