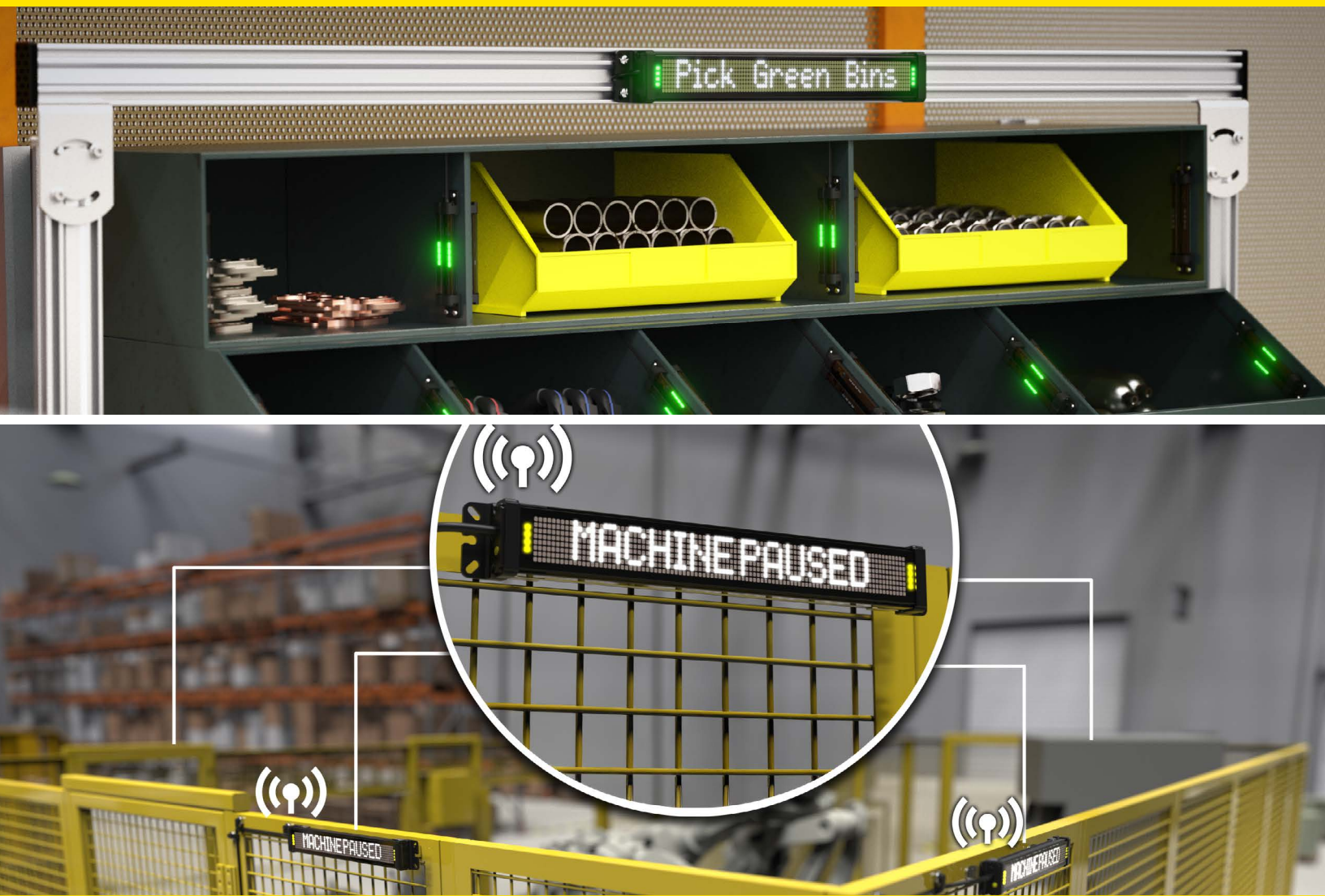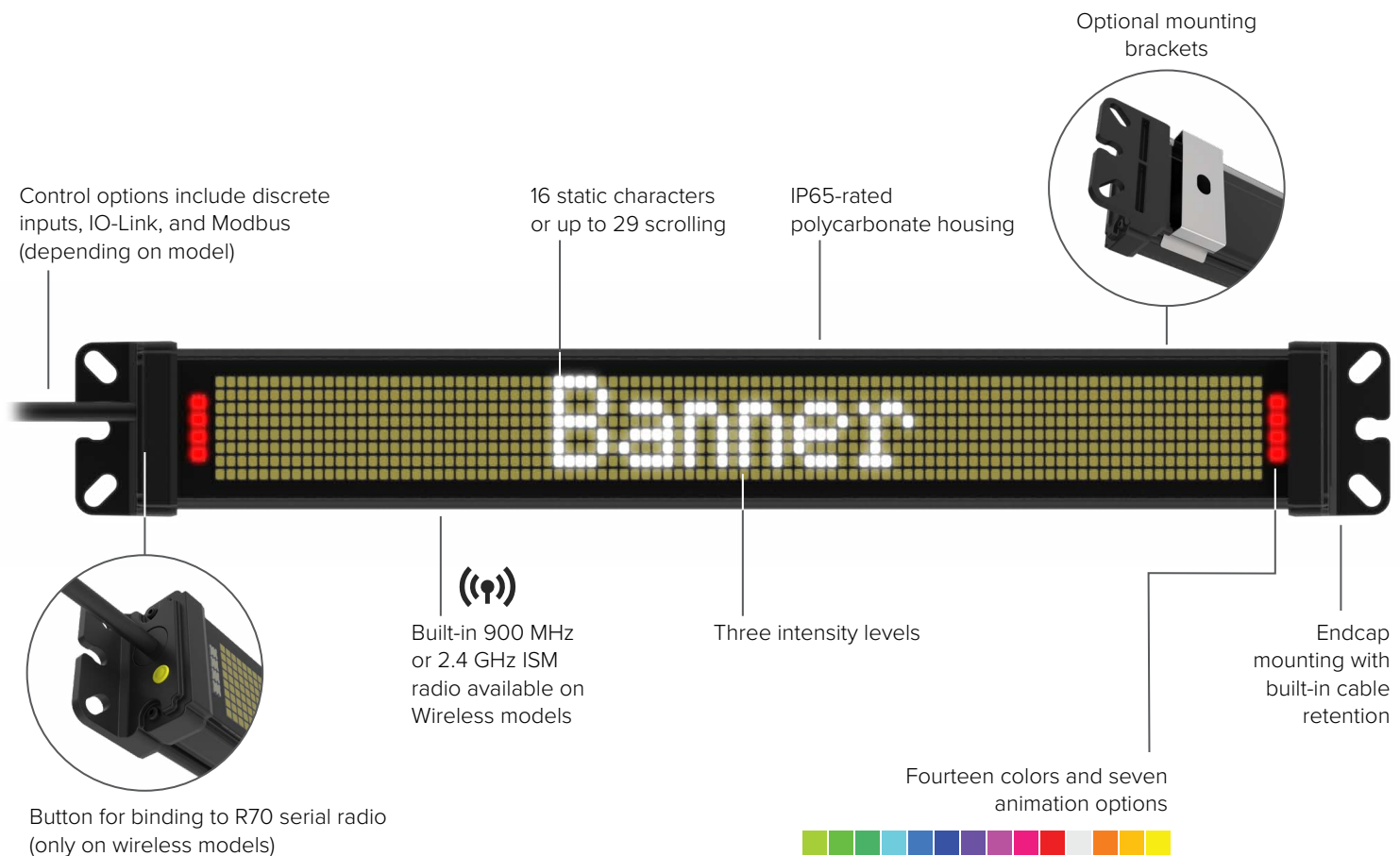# SD50 Status Display

Provide the Right Status Information in the Most Helpful Locations

- Easily configurable, versatile display can be installed nearly anywhere, making it a simple yet powerful alternative to complex HMIs and other displays
- Great for displaying takt time, equipment status, assembly sequences, counts, and measurements where they are most useful
- Discrete, IO-Link®, and Modbus® models integrate into many different systems and applications, especially Banner sensing, safety, and monitoring solutions
- Reliable wireless performance built on Banner's proven wireless serial network technology, available in 900 MHz and 2.4 GHz model options
- Quick and easy configuration—define the desired text and call it via discrete control or process data
- Bright white LED display and multicolor status LEDs, legible from 10 meters, help keep operators informed so they can respond quickly and accordingly

BANNER®

SD50 Features and Functionality

Optional mounting brackets

Control options include discrete inputs, IO-Link, and Modbus (depending on model)

16 static characters or up to 29 scrolling

IP65-rated polycarbonate housing

Button for binding to R70 serial radio (only on wireless models)

Built-in 900 MHz or 2.4 GHz ISM radio available on Wireless models

Three intensity levels

Endcap mounting with built-in cable retention

Fourteen colors and seven animation options

Communicate Critical Information

Equipment Status

Translate machine outputs to actionable information

Replace Filter

Assembly Instructions

Step through sequential operator guidance

ADD PART #243 >>

Measurement

Convert and display dynamic sensor outputs like distance, level, and more

TANK LEVEL

Timer
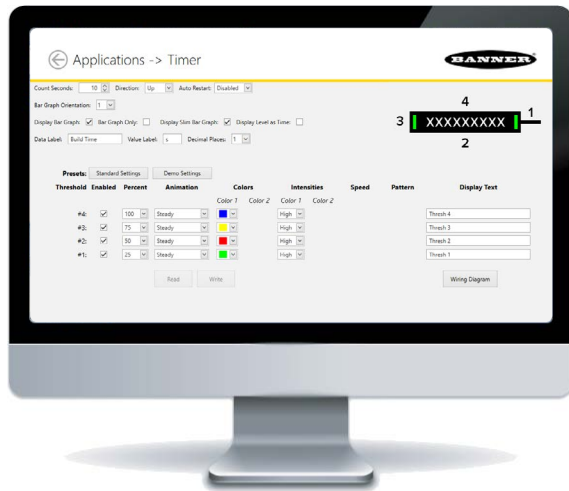
Start, stop, and reset the timer to display takt time and more

TAKT TIME:4.6s

Counter

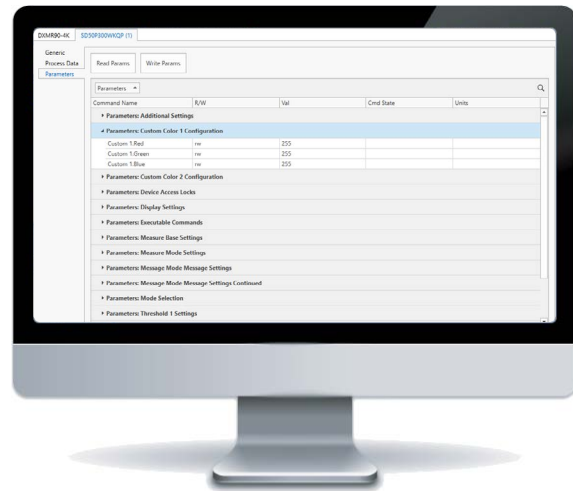Increase or decrease the count value based on input pulses

SCRAP COUNT:8

How It Works

Discrete Model

Configure text and indication via free
Pro Editor software and control what is
displayed via the discrete inputs
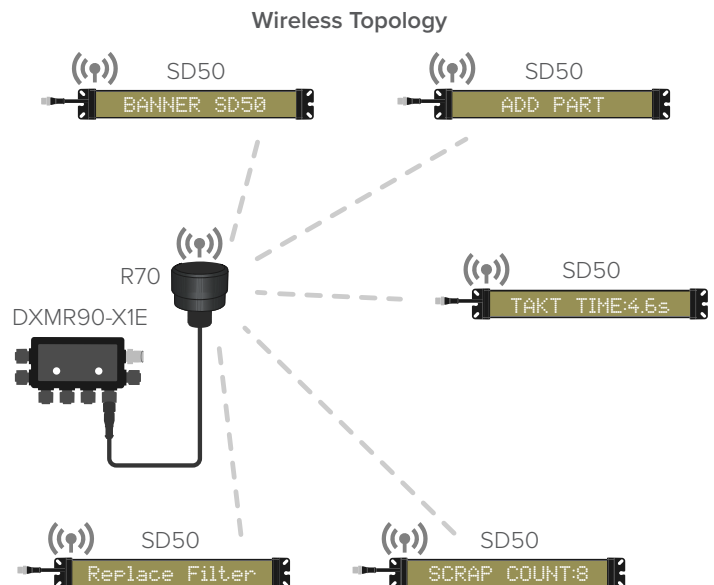(Pro converter cable sold separately)

IO-Link and Modbus Models

Choose a mode and functional parameters,
then use process data or holding registers to
send strings and values for dynamic indication
and display updates

Wireless Models

The SD50 Wireless Status Display uses its integrated
900 MHz or 2.4 GHz radio to join a network created
by an R70 Serial Data Radio, which is configured as
a client and linked either directly to a Modbus RTU
controller or, for Modbus TCP or EtherNet/IP™ systems,
through a DXMR90-X1E gateway. Each SD50 functions
as a server radio communicating with the R70, forming
a star topology with the R70 at the center and each
SD50 as a node, while MultiHop tree configurations
extend coverage when required. Once bound, the
SD50 operates as a wireless Modbus device, with
display content and LED indication defined by writing
to its Modbus holding registers. This architecture
supports straightforward expansion by binding
additional SD50 units for rapid deployment and
reconfiguration as needs change.

Wireless Topology

SD50 Status Display

Description	Display Length	Control	Connection	Models
SD50 Pro Status Display	300 mm	Discrete	150 mm PVC-jacketed cable with 4-pin M12 male QD	SD50P300WD15QP
		IO-Link		SD50P300WKQP
		Modbus		SD50P300WSQP

Description	Radio Frequency	Connection	Models
SD50 Wireless Status Display	900 MHz ISM Radio	150 mm PVC-jacketed cable with 4-pin M12 male QD	SD50P300WSR9QP*
	2.4 GHz ISM Radio		SD50P300WSR2QP*

*R70 Serial Data Radio required for use with wireless models
900 MHz model: R70SR9MQ
2.4 GHz model: R70SR2MQ

Specifications

Supply Voltage	Discrete, Modbus, Wireless: 12 to 30 V DC IO-Link: 18 to 30 V DC
Construction	Polycarbonate
Operating Conditions	–20 to +50 °C
Environmental Rating	IP65
Certifications	CE, cULus LISTED, UKCA

28 mm

52 mm

386 mm

Accessories

LMBSD50
Clip bracket

LMBSD50MAG
Magnetic clip bracket

LMBSD50-180S
180° clip bracket

LMBSD50-180SMAG
180° magnetic clip bracket

DXM1200-X2
IIoT Gateway

DXMR90-X1E
Industrial Controller

DXMR110-8K
IO-Link Master Controller

M12 Double-ended Cordsets
Straight connector models listed; right-angle models available (example, BC-M12F4**A**-M12M4**A**-22-1)

4-Pin
BC-M12F4-M12M4-22-1
1 m (3.28 ft)
BC-M12F4-M12M4-22-5
5 m (16.4 ft)
BC-M12F4-M12M4-22-10
10 m (30.81 ft)

5-Pin
BC-M12F5-M12M5-22-1
1 m (3.28 ft)
BC-M12F5A-M12M5A-22-5
5 m (16.4 ft)
BC-M12F5A-M12M5A-22-10
10 m (30.81 ft)

PRO-KIT
A single Pro-Kit provides everything you need to configure text and light color on discrete models of the SD50 Status Display.

PRO EDITOR SOFTWARE

Banner's Pro Editor Software
Free Pro Editor Software makes configuring SD50 discrete models fast and intuitive. Select display modes and configure display text, LED colors, and LED animations for control via discrete inputs, bringing clear, actionable visual guidance to the visual factory.