

PRODUCTION SYSTEMS

OEE COUNTER

Complex production processes are presented using easily understood KPIs

- Measures and presents change-over time, downtime and no. of units produced
- Complete stand-alone system – no connection to ERP or MES required
- Smart, ready-to-use functions – fast, simple start-up
- Machine efficiency status in real time



New!

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Improving your productivity

OEE COUNTER

Binar's new OEE Counter measures and presents machine efficiency using easily understood KPIs, Key Performance Indicators. Bottlenecks are identified automatically, ensuring action is directed to where it will be most effective.

The display becomes the machine's instrument panel, allowing process efficiency to be monitored in real time. The KPIs then form the basis for day-to-day control decisions and continuous improvements.

Binar's OEE Counter is a complete solution that is simple to install, making start-up fast and simple. It can be used with both new and existing machines.

Apart from the OEE, Overall Equipment Effectiveness value (A = Availability, P = Performance, Q = Quality), the OEE counter can also display the following KPIs:

- Cycles per minute
- Average cycle time
- Shortest cycle time
- Remaining no. of units to be produced
- No. of discarded units
- Total Downtime
- Total Change-over Time
- Total Break Time

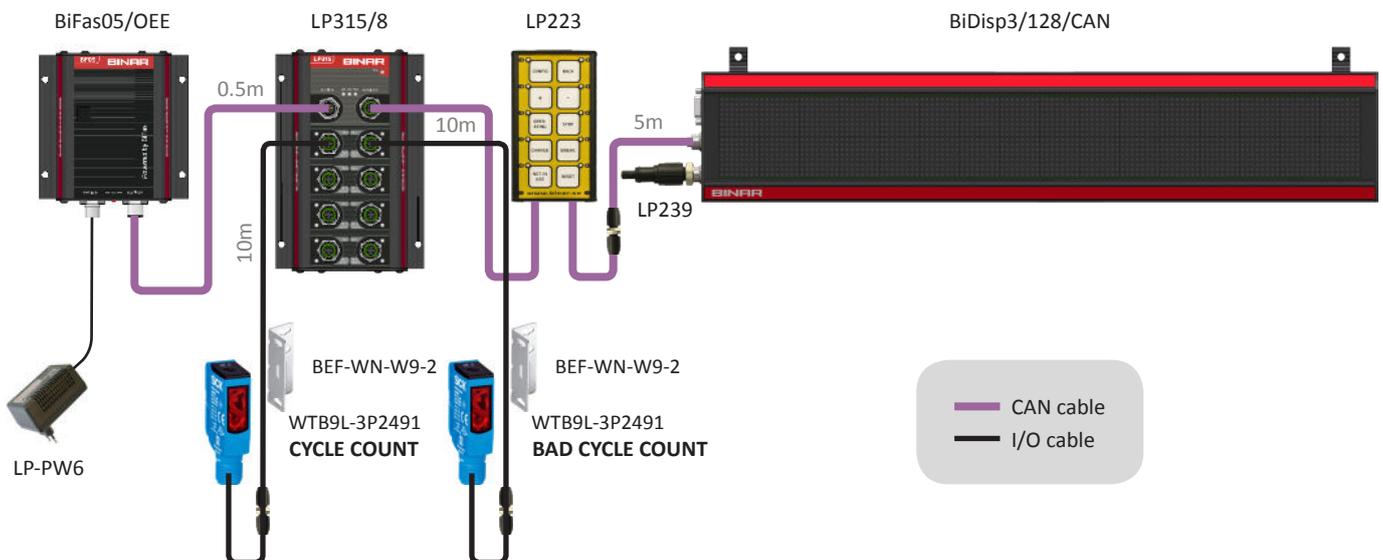
More information?

Binar also offers solutions that include downtime follow-up and visualisation for extensive processes.

TECHNICAL DATA

	No.	Part No.	Name
Components included (basic package)	1	54405	BiDisp3/128/CAN
	1	54454	BiFas05/OEE
Part No. 54447	1	51311	LP315/8 I/O Box
	1	51223	LP223 Ten button box
	2	50413	WTB9L-3P2491 Photoelectric Sensor
	2	50414	BEF-WN-W9-2 Bracket for sensor
	1	50326	LP-PW6 Power Supply
	1	50239	LP239 Termination
	1	50235	CAN Cable, 0.5m
	1	50232	CAN Cable, 5m
Options	2	50132	I/O Cable, 10m
		50231	CAN Cable, 2m
		50233	CAN Cable, 10m
		50130	I/O Cable, 2m
		50131	I/O Cable, 5m
		50243	T Connector
Readability distance	Up to 40m		
Font colour	Red, Green and Yellow		
CE	EN 61000-6-4 and EN 61000-6-2		
Power Supply	230V		
Temperature Range	0 - 50°C		
Humidity	0 - 95% non-condensing		
Mounting	Brackets included		

SYSTEM OVERVIEW



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DISPLAY MODES

Tip!
You can click the + or - button at any time to select the display mode manually.

OPERATING



E.g.
1: No. of produced parts OK
2: Total parts produced

STOP



E.g.
1: Current downtime
2: Total downtime

CHANGE



E.g.
1: Current change-over time
2: Total change-over time

BREAK



E.g.
1: Current break time
2: Total break time

OEE



E.g.
1: Q, Quality
2: OEE

TOGGLE



E.g.
1: Time before target is reached
2: No. of parts remaining

FUNCTION

Save data?
Binar can supply software that will allow data to be collected and saved in MS Excel. Contact Binar for further details.

STATUS INDICATION

The three LEDs show the unit status.

PWR = Power supply OK
BUS = Bus OK
ERR = Internal error/communication error

LP315/8 I/O Box			
1	IN	CYCLE COUNT	Counts the no. of cycles
	OUT	---	---
2	IN	BAD CYCLE COUNT	Counts the no. of non-approved cycles
	OUT	---	---
3	IN	OPERATING	Activate OPERATING
	OUT	OPERATING	Producing
4	IN	STOP	Activate STOP
	OUT	STOP	Stop
5	IN	CHANGE OVER	Activate CHANGE OVER
	OUT	CHANGE OVER	Change-over
6	IN	NOT IN USE	Activate NOT IN USE
	OUT	NOT IN USE	Machine not in use
7	IN	BREAK	Activate BREAK
	OUT	BREAK	Break
8	IN	START/RESET	Start new job/reset all counters
	OUT	TARGET REACHED	Parts target reached

CONFIGURATION

Hold in for 3s to start configuration.
Click to choose or confirm.

UP

Increase/scroll up.

OPERATING

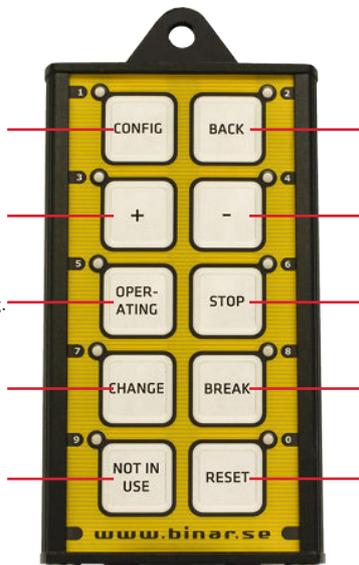
Activate OPERATING to start measuring.
(OPERATING/STOP is now automatic.)

CHANGE

Activate CHANGE OVER.

NOT IN USE

Activate NOT IN USE.



BACK

Cancel and return to submenu.

DOWN

Decrease/scroll down.

STOP

Activate STOP. (Automatically activated if CYCLE COUNT fails.)

BREAK

Activate BREAK.

RESET

Start a new job and reset.

Getting started

- Carry out configuration, hold in CONFIG
- Click RESET
- Click CHANGE and begin change over
- Click OPERATING to start
- If AUTO IDEAL CYCLE TIME is activated, measurement of the ideal cycle time is activated after NO. OF CYCLES. Automatic stop is overridden under NO. OF CYCLES
- CYCLE COUNT is registered at IN 1 and counts the no. of machine cycles
- If CYCLE COUNT fails, the system switches automatically to STOP
- When CYCLE COUNT is resumed, the system switches automatically to OPERATING

KEY PERFORMANCE INDICATORS

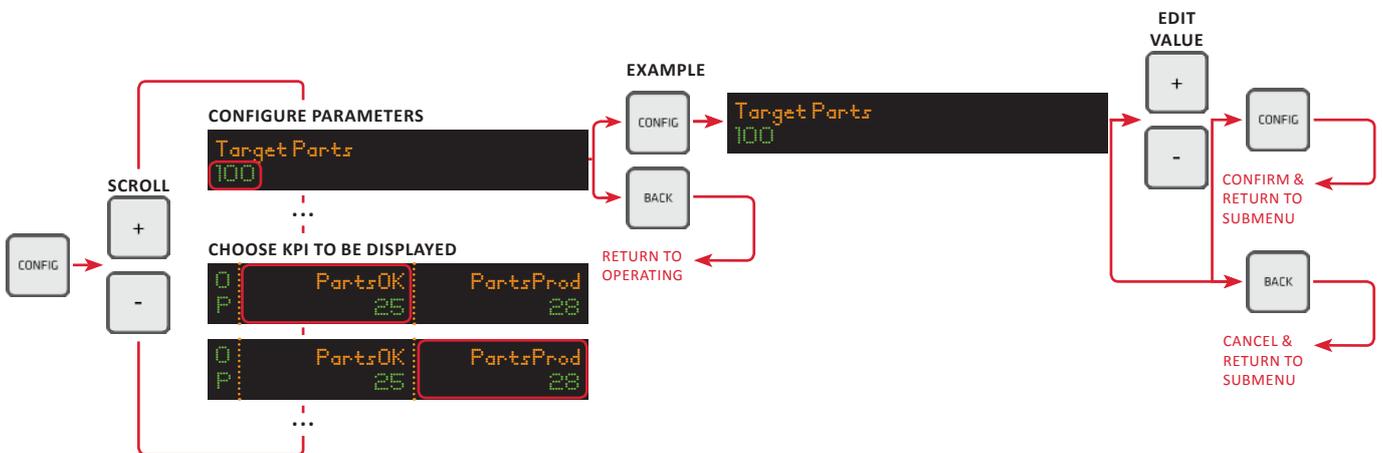
1	CycleCount	Cycle Counter	19	TotPlaProTi	Total Planned Production Time
2	PartsProd	Parts Produced	20	ActOpTime	Actual Operating Time
3	PartsOK	Parts Produced OK	21	TotOpTime	Total Operating Time
4	CyclesNOK	Cycles Not OK	22	ActDownTime	Actual Down Time
5	PartsNOK	Parts Produced Not OK	23	TotDownTime	Total Downtime
6	TargParts	Target No Of Parts To Be Produced	24	TotDownTiLo	Total Downtime Loss
7	PartToTarg	No Of Parts To Target	25	ActChaTime	Actual Change-over Time
8	Backlog	Backlog	26	TotChaTime	Total Change-over Time
9	TargComp	Target Completion	27	ChaTimeRat	Change Time Ratio
10	TimeToTarg	Time To Target	28	ActBreakTi	Actual Break Time
11	IdealCycTi	Ideal Cycle Time	29	TotBreakTi	Total Break Time
12	AutIldCycTi	Automatic Ideal Cycle Time	30	AVAI	Availability
13	Parts/Cyc	Parts Per Cycle	31	PREF	Performance
14	ShoCycTime	Shortest Cycle Time	32	Q	Quality
15	LatCycTime	Latest Cycle Time	33	QL	Quality Loss
16	MedCycTime	Medium Cycle Time	34	OE	AVAI x PERF
17	Cycles/Min	Cycles per minute	35	OEE	AVAI x PERF x Q
18	Cycles/Sec	Cycles per second	36	SetParts	Set Parts

What to display?

With a simple configuration you can choose the KPIs you wish to display in each mode.

CONFIGURATION

TARGET PARTS	<i>n</i>	No. of units to be produced, where <i>n</i> = 1-32000
PARTS/CYCLE	<i>n</i>	No. of units produced per cycle, where <i>n</i> = 1-100
PARTS NOT OK/CYCLE	<i>n</i>	No. of discarded units produced per cycle, where <i>n</i> = 1-100
AUTO IDEAL CYCLE TIME	<i>n</i>	OFF <i>n</i> = 0 ON <i>n</i> = 1
NO. OF CYCLES	<i>n</i>	No. of cycles, where <i>n</i> = 1-100
MAN IDEAL CYCLE MIN	<i>n</i>	Manual Ideal Cycle Time in minutes, where <i>n</i> = 0-32000
MAN IDEAL CYCLE SEC	<i>n</i>	Manual Ideal Cycle Time in seconds, where <i>n</i> = 0-59
TOGGLE DISPLAY ON	<i>n</i>	OFF <i>n</i> = 0 ON <i>n</i> = 1
TOGGLE TIME	<i>n</i>	Display interval for TOGGLE display mode in seconds, where <i>n</i> = 1-60



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