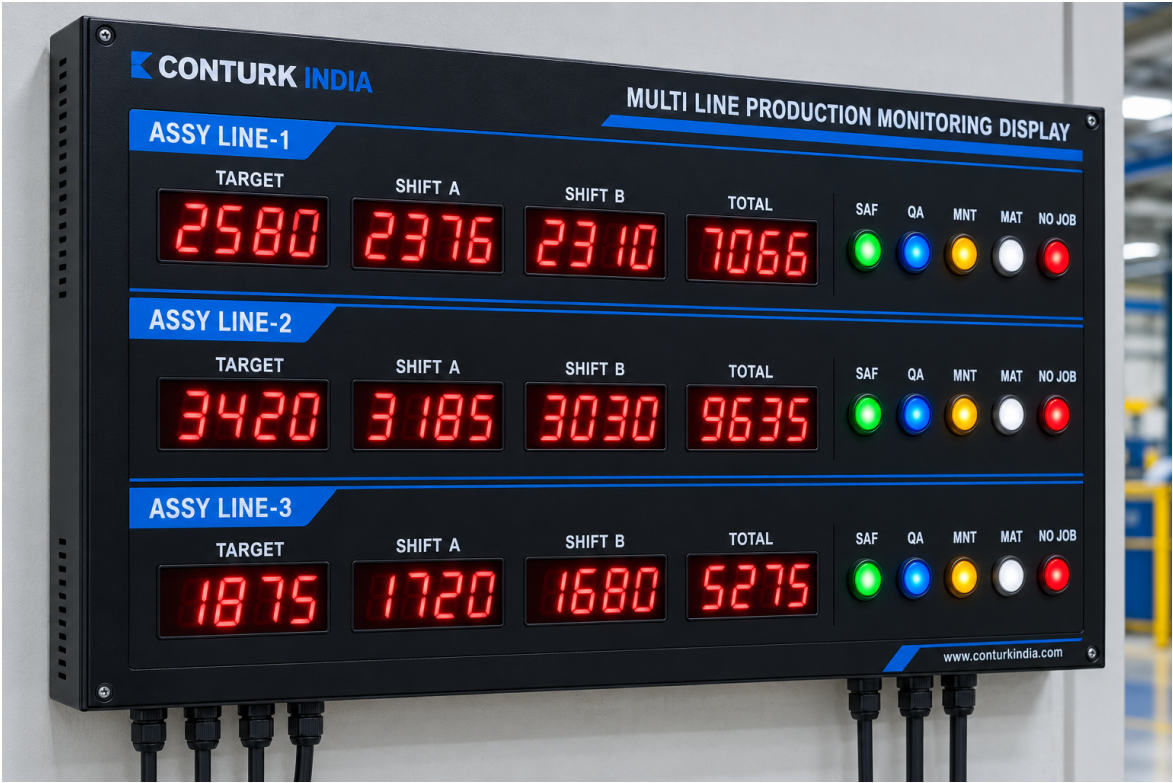


MULTI LINE PRODUCTION MONITORING DISPLAY

Industrial Andon Production & Maintenance Status Monitoring Board

Real-time production visibility for three assembly lines with large 4-inch numeric displays and 15 independently controlled status indications.



24 VDC	Modbus RTU / RS485	12 × 4-digit displays	15 status channels
Wall mounted	4-inch LED	Slave ID up to 199	PLC compatible

Product concept: One single-side wall-mounted board provides a common visual reference for production quantity and line status. The display acts as a **Modbus RTU slave**; a PLC, SCADA or industrial controller writes production values and status bits.

01 | PRODUCT OVERVIEW

The **CT-DP3-4-RS485** is a rugged multi-line production monitoring display engineered for factory-floor Andon applications. Three horizontal line sections show **Target, Shift A, Shift B and Total** production counts, while five dedicated status lamps per line provide immediate visibility of Safety, Quality, Maintenance, Material and No Job conditions.

Item	Specification
Configuration	3 assembly lines
Numeric parameters	4 per line: TARGET / SHIFT A / SHIFT B / TOTAL
Numeric displays	12 total, 4-inch seven-segment LED
Digits	4 digits per numeric window
Status indications	15 total: 5 per line
Status labels	SAF / QA / MNT / MAT / NO JOB
Supply	24 VDC
Communication	Modbus RTU over RS485; display operates as SLAVE
Mounting	Single-side, wall mounted
Typical enclosure	Approx. 2000 × 800 × 100 mm; final GA is project-specific

Status indication philosophy

Label	Meaning	Lamp colour
SAF	Safety	Green
QA	Quality	Blue
MNT	Maintenance	Amber / Yellow
MAT	Material	White
NO JOB	No Job condition	Red

Key product features

- ✓ Large 4-inch high-brightness red seven-segment numerals for long-distance visibility.
- ✓ Three-line layout gives production supervisors a single-point visual status of the area.
- ✓ 15 independent status channels for safety, quality, maintenance, material and job availability.
- ✓ Modbus RTU RS485 interface for direct PLC / SCADA integration.
- ✓ User-selectable slave ID, baud rate, serial format and register start address.
- ✓ Integer or floating-point data with selectable byte/word swap handling.
- ✓ Industrial wall-mounted enclosure with project-specific mechanical dimensions.

02 | MODBUS RTU / RS485 COMMUNICATION

The display is configured as a **Modbus RTU slave**. Production values are written to user-selectable holding registers. Status lamps are controlled through a 16-bit status word; the specified bit becomes HIGH to turn the corresponding relay/status channel ON.

Parameter	Specification
Protocol	Modbus RTU
Physical layer	RS485, half duplex
Slave ID	User selectable, up to 199
Baud rate	1200 / 2400 / 4800 / 9600 / 19200 bps
Serial mode	8N1 / 8N2 / 8O1 / 8E1 (selectable)
Data type	Integer or Float
Endian / swap	Float / Swap Float selectable
Holding registers	40001 to 49997, user selectable
Status control	16-bit Modbus word; bit = 0 → relay OFF, bit = 1 → relay ON

PLC / SCADA connectivity concept

PLC / SCADA / Industrial Controller	RS485 A(+) / B(-)	CONTURK CT-DP3-4-RS485 MODBUS SLAVE
Production registers Target / Shift A / Shift B / Total	Modbus RTU Half Duplex	12 numeric displays + 15 status channels

Example production register map

Register	Function
40001	Line-1 Target
40002	Line-1 Shift A
40003	Line-1 Shift B
40004	Line-1 Total
40005	Line-2 Target
40006	Line-2 Shift A
40007	Line-2 Shift B
40008	Line-2 Total
40009	Line-3 Target
40010	Line-3 Shift A
40011	Line-3 Shift B
40012	Line-3 Total
Status word	15 status outputs; one 16-bit word, bits 0–14 used

Note: The register addresses above are an example mapping. The actual starting holding register is user selectable within the supported range.

03 | TECHNICAL SPECIFICATIONS

Parameter	Specification
DC supply	24 VDC
Display type	Seven-segment LED
Numeric character height	4 inch (101.6 mm)
Digits per window	4
Numeric windows	12
Status indicators	15
Status output channels	15 relay outputs / status channels
Status logic	Modbus bit LOW = relay OFF; HIGH = relay ON
Communication	Modbus RTU RS485 slave
Mounting	Wall mounted, single side
Enclosure	Industrial metal enclosure; black powder-coated finish
Typical dimensions	Approx. 2000 W × 800 H × 100 D mm; confirm on GA drawing
Operating environment	Industrial indoor use; final IP rating to be confirmed as per project enclosure

Terminal / wiring concept

Terminal / interface	Connection
Power +24V	24 VDC positive
Power 0V	24 VDC negative / common
RS485 A / D+	Modbus RS485 A(+)
RS485 B / D-	Modbus RS485 B(-)
Shield	Cable shield / functional earth as per site practice
Status outputs	15 relay/status channels mapped to Modbus status bits 0–14

Industrial applications

• Automotive assembly and sub-assembly lines	• Production quantity / target monitoring
• Andon and line-status management	• Maintenance and breakdown status indication
• Quality hold / inspection status	• Material availability indication
• No-job / idle-line indication	• OEE and shop-floor visual management

Ordering information

Model	Description
CT-DP3-4-RS485	3-line production monitoring display; 12 × 4-digit LED displays; 15 status indications; Modbus RTU RS485 slave
CT-DP3-4-PI*	Physical-input version — available as a project-specific configuration, subject to technical confirmation

Manufacturer: CONTURK INDIA PVT LTD | **Website:** www.conturkindia.com

Engineering note: Enclosure dimensions, IP rating, relay contact rating, cable entry arrangement, mounting hole pattern and final register map should be confirmed against the approved project GA / wiring drawing before production.