

FIELD WORKFLOW

Honeywell TA3840C

Marine Communication Rack

Honeywell TA3840C centralizes marine tank-gauging measurements and delivers calculated level, volume, pressure and temperature data to shipboard monitoring systems.

Release-gate sequence



Before work starts

- Confirm the 19-inch rack is the correct 12U or 21U TA3840C execution.
- Export channel assignments, tank tables, serial settings and alarm configuration.
- Identify every radar, pressure, temperature, trim, heel and analog input circuit.
- Record installed signal-board type and position in each available expansion slot.
- Agree a shipboard isolation and loading-system continuity plan with operations.
- Prepare known signal inputs and serial diagnostics for acceptance testing.

Field record essentials

MODEL ID Record TA3840C exactly.	SYSTEM Honeywell marine fixed tank gauging
SETTINGS Preserve the verified installed configuration.	TEST BASIS Define static and functional acceptance evidence.

Pre-installation verification

CHECK 01

Confirm the 19-inch rack is the correct 12U or 21U TA3840C execution.

CHECK 02

Export channel assignments, tank tables, serial settings and alarm configuration.

CHECK 03

Identify every radar, pressure, temperature, trim, heel and analog input circuit.

CHECK 04

Record installed signal-board type and position in each available expansion slot.

CHECK 05

Agree a shipboard isolation and loading-system continuity plan with operations.

CHECK 06

Prepare known signal inputs and serial diagnostics for acceptance testing.

Interface inventory

- Sensor acquisition: Marine radar, analog transmitters, pressure, temperature, trim and heel signals
- I/O expansion: Analog input boards or multifunction I/O boards in the two available slots
- System output: EMS and Modbus RTU data for gauging software and loading systems
- Operator access: Function keyboard and LCD display for measurement and alarm data

Hold point

Do not continue if the complete model, field-circuit identity, stored settings, protective functions or safe isolation state cannot be verified. Preserve existing wiring records and escalate the exact unresolved item.

Installation sequence

1

Capture the complete TA3840C nameplate, rack size and cabinet position.

2

Back up the active configuration and print the channel and communication maps.

3

Isolate rack power and verify absence of hazardous energy at the supply board.

4

Label serial, analog, binary, sensor and relay connections before disconnection.

5

Use grounded ESD controls while transferring processing and interface boards.

6

Reinstall the exact board population and reconnect conductors to recorded points.

7

Verify supply polarity, shields, serial termination and relay contact ratings.

8

Energize under control and compare local display values with connected systems.

Commissioning and acceptance

GATE 1

Verify TA3840C self-status and confirm that no unexpected cabinet alarm remains.

GATE 2

Inject representative 4-20 mA inputs and compare local engineering values.

GATE 3

Check cargo-tank, ballast, draft, trim and heel calculations against test inputs.

GATE 4

Prove EMS and Modbus RTU data at the intended receiving systems.

GATE 5

Operate selected on/off outputs and verify external relay behavior.

GATE 6

Check alarm annunciation on the LCD and at each configured remote destination.

GATE 7

Review all restored channel assignments against the approved ship drawing.

GATE 8

Archive configuration, readings, communication tests and final alarm state.

Fault-response checks

- Missing sensor value: verify channel assignment, field power, signal type and terminal continuity.
- Incorrect tank calculation: recheck tank table, sensor mapping and trim/list input validity.
- No EMS data: confirm selected serial channel, rate, framing and conductor polarity.
- No Modbus RTU response: inspect address, protocol settings, termination and receiver wiring.
- Output does not switch: compare configured function with relay contact assignment and load rating.
- Display and loading system disagree: compare raw input, calculation basis and transmitted register.

Acceptance boundary

Release only after the normal state, commanded state, principal fault state and recovery behavior have all been observed at the field device, module and control-system indication.

Reference and handover

SOURCE 1

Honeywell Communication Interface Unit product page for TA3840C

SOURCE 2

Honeywell PMC Marine Solutions brochure, fixed tank gauging communication-rack architecture

Related products

Verified related products on ApterPower

Honeywell C7061F2001

Honeywell portfolio reference

[View Honeywell C7061F2001](#)

Honeywell TK-PPD011

Honeywell portfolio reference

[View Honeywell TK-PPD011](#)

Honeywell TK-FTEB01

Honeywell portfolio reference

[View Honeywell TK-FTEB01](#)

CONFIGURATION

Final settings and mappings archived

WIRING

Terminal and conductor labels reconciled

TEST RECORD

Measured results and fault tests retained

OPERATIONS

Normal indication and response briefed

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Share the exact TA3840C nameplate, application and required quantity for a model-specific quotation.