

# Solumina Mate-Demate

Precision Connection Tracking for Complex Aerospace and Defense Systems

In aerospace and defense manufacturing – where satellites, avionics, and other mission-critical systems require thousands of staged, precise wired connections – maintaining connection integrity is essential.

**Solumina Mate-Demate** provides engineers and technicians with a dedicated tool for tracking, validating, and managing connector states, from initial assembly and functional testing to final flight readiness. Delivering robust traceability, flexible configuration, and native integration with Solumina MES, Solumina Mate-Demate helps reduce rework, ensure compliance, and enhance operational transparency.

## Why Solumina Mate-Demate?

Solumina Mate-Demate empowers manufacturers to:

- Prevent connection overuse with real-time mate/demate tracking and saver use
- Streamline test configuration with flexible templates and bulk imports
- Enforce engineering limits and role-based privileges
- Accelerate sign-off for flight readiness
- Maintain data integrity and audit trails across integration phases

Rec ID	Ref Des	Length Critical? For Info Only	Cable Type	(From Connector) Unit (RD Jpo...	(From Connector) RD Jport	(From C)	Action
1	C101	333	SR141-LL +26GHz	XMT100	J4	TLM XM	[Check] [Edit]
2	C102		SR141-LL +26GHz	XMT101	J4	TLM XM	[Check] [Edit]
3	C103		SR141-LL +26GHz	XMT101	J3	TLM XM	[Check] [Edit]
4	C250		SR141-LL +26GHz	ARLN250	J2	LNA	[Check] [Edit]
5	C251		SR141-LL +26GHz	ARLN251	J2	LNA	[Check] [Edit]
6	C252		SR141-LL +26GHz	SWPL250S1	J2	SWITCH	[Check] [Edit]
7	C253		SR141-LL +26GHz	SWPL250S1	J3	SWITCH	[Check] [Edit]
8	C254		SR141-LL +26GHz	SWPL250S2	J2	SWITCH	[Check] [Edit]
9	C255		SR141-LL +26GHz	RET250	J3	Tracking	[Check] [Edit]
10	C256		SR141-LL +26GHz	RET251	J3	Tracking	[Check] [Edit]

*The Connection Workbench helps technicians record and update connection statuses on the shop floor.*

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## Key Features

- **End-to-End Connection Lifecycle Tracking:** Capture every connection/test event with full visibility into connection state history – including Mate, Demate, Breakout Box Installed, Saver Use, Torque, Flight Ready, and more.
- **Custom Templates & CSV Imports:** Create or upload test configurations with 20-50+ fields and 1,000+ connection records using flexible metadata schemas and reusable templates.
- **Solumina Build Unit Integration:** Import build units from Solumina directly into Mate-Demate for test-specific connection tracking. Units are mirrored for use during connection planning and execution.
- **Interactive Connection Workbench:** Shop floor technicians can record and update connection statuses in real time, with filtering, search, and audit history – all aligned to test phase and configuration.
- **Built-in Reporting & Status Aggregation:** Aggregate and analyze connection metadata by connector, equipment, or unit. Counts and status summaries support validation workflows and help identify bottlenecks or outliers in test execution.
- **Dynamic Configuration Management:** Define unlimited custom fields with field-level permissions, dropdowns, data types, and validation logic tailored to each program's needs.
- **Role-Based Access Control:** Enforce who can view or edit fields based on privileges linked to Solumina user roles – ensuring compliance with engineering and security protocols.

[Learn More](#)

Solumina Mate-Demate is available as a module within the Solumina Manufacturing Operations Platform. Contact your iBase-t representative to learn more or request a demo.

## About iBase-t

iBase-t is the global leader in cloud software for the aerospace and defense industry. Committed to innovation, customer success, and product excellence, iBase-t ensures digital continuity across manufacturing, quality, and maintenance, repair, and overhaul (MRO) operations on a global scale. iBase-t's Solumina Manufacturing Operations Platform is a cloud-native solution that establishes a digital ecosystem to drive innovation and improve operational performance for the most critically complex manufacturers. iBase-t customers include Lockheed Martin, Northrop Grumman, Rolls Royce, Pratt & Whitney, and Textron.