

UNIT_TRANSPORT

1. Description

The unit transport system carries products through various conveyor zones and interfaces with other subsystems (e.g., singulator, camera, sorter).

2. Functions

- Transport products from input to output.
- Interact with subsystems (singulator, camera, etc.) for sorting and identification.

3. I/O and Signals

Signal Name	Type	Description	Panel
TRANSPORT_START_CMD	DO	Start transport	PANEL_POWER_PDP
TRANSPORT_STOP_CMD	DO	Stop transport	PANEL_POWER_PDP
TRANSPORT_STATUS_FB	DI	Transport system status	PANEL_POWER_PDP

4. Interlocks & Safety

- Stop transport if jam detected (via PHOTO_EYE_JAM).
- Stop transport if no product detected at induct point (via PHOTO_EYE_INDUCT).

5. Dependencies

- Dependent on power supply (PANEL_POWER_PDP).
- Relies on PHOTO_EYE_INDUCT to trigger the start of transport.

6. Alarms

Alarm ID	Condition	Message
A_TRANSPORT_01	Transport failure	"Transport Error"

7. HMI / Operator Interaction

- Displays transport status.
- Option to manually override start/stop commands.