Communicate with the Module

POINT I/O modules send (consume) and receive (produce) I/O data (messages). You map this data onto the processor memory.

These modules produce 1 byte of input data (scanner Rx). It does not consume I/O data (scanner Tx).

Default Data Map for 1734-IB2

Message size: 1 Byte

	7	6	5	4	3	2	1	0
Produces (Rx)							I1	I0
Consumes (Tx)	No consumed data							
Where:	I1 = Channel 1, I0 = Channel 0, 0 = Off, 1 = On							

Default Data Map for 1734-IB4, 1734-IB4K

Message size: 1 Byte

	7	6	5	4	3	2	1	0
Produces (Rx)					I3	I2	I1	I0
Consumes (Tx)	No consumed data							
Where:	I3 = Channel 3, I2 = Channel 2, I1 = Channel 1, I0 = Channel 0, 0 = Off, 1 = On							

Default Data Map for 1734-IB8, 1734-IB8K

Message size: 1 Byte

	7	6	5	4	3	2	1	0
Produces (Rx)	I7	I6	I5	I4	I3	I2	I1	I0
Consumes (Tx)	No consumed data							
Where:	I7 = Channel 7, I6 = Channel 6, I5 = Channel 5, I4 = Channel 4, I3 = Channel 3, I2 = Channel 2, I1 = Channel 1, I0 = Channel 0, 0 = Off, 1 = On							

Interpret Status Indicators

See the following diagram and table for information on how to interpret the status indicators:
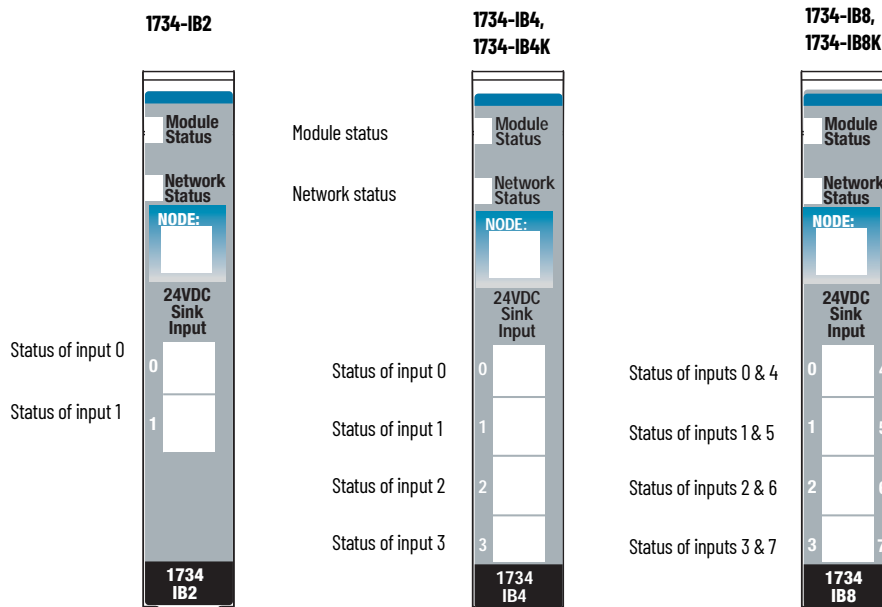
Indicator Status for Modules

	Status	Description
Module status	Off	No power applied to device.
	Green	Device operating normally.
	Flashing green	Device needs commissioning due to missing, incomplete, or incorrect configuration.
	Flashing red	Recoverable fault.
	Red	Unrecoverable fault – may require device replacement.
	Flashing red/green	Device is in self-test mode.
Network status	Off	Device is not online: - Device has not completed dup_MAC-id test. - Device not powered – check module status indicator.
	Flashing green	Device is online but has no connections in the established state.
	Green	Device is online and has connections in the established state.
	Flashing red	One or more I/O connections are in timed-out state.
	Red	Critical link failure – failed communication device. Device detected error that prevents it from communicating on the network.
	Flashing red/green	Communication faulted device – the device has detected a network access error and is in communication faulted state. Device has received and accepted an Identity Communication Faulted Request – long protocol message.
I/O status	Off	Input is in the off state.
	Yellow	Input is in the on state.

Specifications

POINT I/O Input Module – 1734-IB2, 1734-IB4, 1734-IB4K, 1734-IB8, 1734-IB8K

Attribute	Value
Inputs per module	**1734-IB2** – 2 (1 group of 2), sinking **1734-IB4, 1734-IB4K** – 4 (1 group of 4), sinking **1734-IB8, 1734-IB8K** – 8 (1 group of 8), sinking
Voltage, on-state, min	10V DC
Voltage, on-state, nom	24V DC
Voltage, on-state, max	28.8V DC
Current, on-state, min	2 mA
Current, on-state, nom	4 mA @ 24V DC
Current, on-state, max	5 mA
Voltage, off-state, max	5V DC
Current, off-state, min	1.5 mA
Impedance, input, nom	3.6 kΩ
Impedance, input, max	4.7 kΩ
Input filter time[1] Off-to-on On-to-off	0.5 ms hardware plus 0…63 ms (user-selectable) 0.5 ms hardware plus 0…63 ms (user-selectable)
Field wiring terminations	**1734-IB2** 0 – Input 0 1 – Input 1 2 – No connection 3 – No connection 4 – Common 5 – Common 6 – User supply 7 – User supply **1734-IB4, 1734-IB4K** 0 – Input 0 1 – Input 1 2 – Input 2 3 – Input 3 4 – Common 5 – Common 6 – User supply 7 – User supply **1734-IB8, 1734-IB8K** 0 – Input 0 1 – Input 1 2 – Input 2 3 – Input 3 4 – Input 4 5 – Input 5 6 – Input 6 7 – Input 7

(1) Input off-to-on filter time is the time from a valid input signal to recognition by the module. Input on-to-off time is the time from a valid input signal to recognition by the module.