

Communication Loss

Description

The LTM R controller monitors communication through:

- the network port
- the HMI port

Network Port Parameter Settings

The LTM R controller monitors network communication creates both a fault and a warning report when the network communications are lost.

On LTM R Version...	The communication loss...
• LTMR•C• • LTMR•D• • LTMR•P•	Is detected as part of the protocol management, without specific adjustable parameters.
• LTMR•M•	Is detected if no communication exchanges occurred for a time period equal to, or longer than, the network port comm loss timeout.
• LTMR•E•	Is detected if no communication exchanges occurred with the Master IP for a time period equal to, or longer than, the network port communication loss timeout.

The network port communications have the following configurable settings:

Parameter	Setting Range	Factory Setting
Network port fault enable	Enable/Disable	Enable
Network port warning enable	Enable/Disable	Enable
Network port comm loss timeout (Modbus, EtherNet/IP and Modbus/TCP only)	0...99.99 s In increments of 0.01 s	2 s
Network port fallback setting ⁽¹⁾	• Hold • Run • O.1, O.2 off • O.1, O.2 on • O.1 off • O.2 off	O.1, O.2 off
Master IP address (EtherNet/IP and Modbus/TCP only)	0.0.0.0 to 255.255.255.255	0.0.0.0

(1) The operating mode affects the configurable parameters for the network port fallback settings.

HMI Port Parameter Settings

The LTM R controller monitors HMI port communications and reports both a warning and a fault if no valid communication has been received by the HMI port for longer than 7 seconds.

The HMI port communication has the following fixed and configurable settings:

Parameter	Setting Range	Factory Setting
HMI port fault enable	Enable/Disable	Enable
HMI port warning enable	Enable/Disable	Enable
HMI port fallback setting ⁽¹⁾	• Hold • Run • O.1, O.2 off • O.1, O.2 on • O.1 off • O.2 off	O.1, O.2 off

(1) The operating mode affects the configurable parameters for the HMI port fallback settings.

Fallback Condition

When the communication between the LTM R controller and either the network or the HMI is lost, the LTM R controller is in a fallback condition. When the communication recovers, the fallback condition is no longer applied by the LTM R controller.

The behavior of logic outputs O.1 and O.2 when the LTM R controller is in fallback condition is determined by:

- The operating mode (see *Operating Modes, page 184*).
- The Network Port Fallback Setting and HMI Port Fallback Setting parameters.

Fallback setting selection can include:

Port Fallback Setting	Description
Hold (O.1, O.2)	Directs the LTM R controller to hold the state of logic outputs O.1 and O.2 as of the time of the communication loss.
Run	Directs the LTM R controller to perform a Run command for a 2-step control sequence on the communication loss.
O.1, O.2 Off	Directs the LTM R controller to turn off both logic outputs O.1 and O.2 following a communication loss.
O.1, O.2 On	Directs the LTM R controller to turn on both logic outputs O.1 and O.2 following a communication loss.
O.1 On	Directs the LTM R controller to turn on only logic output O.1 following a communication loss.
O.2 On	Directs the LTM R controller to turn on only logic output O.2 following a communication loss.

The following table indicates which fallback options are available for each operating mode:

Port Fallback Setting	Operating Mode					
	Overload	Independent	Reverser	2-step	2-speed	Custom
Hold (O.1, O.2)	Yes	Yes	Yes	Yes	Yes	Yes
Run	No	No	No	Yes	No	No
O.1, O.2 Off	Yes	Yes	Yes	Yes	Yes	Yes
O.1, O.2 On	Yes	Yes	No	No	No	Yes
O.1 On	Yes	Yes	Yes	No	Yes	Yes
O.2 On	Yes	Yes	Yes	No	Yes	Yes

NOTE: When you select a network or HMI fallback setting, your selection must identify an active control source.