

<b>MV-90 Communication Error Return Codes - IESO Conforming Meters</b>							
<b>Error Number</b>	<b>Error Code</b>	<b>MV-90 Retry Status</b>	<b>Power Measurements ION</b>	<b>Itron (Schlumberger) Q1000</b>	<b>ABB Alpha Plus</b>	<b>Itron (Schlumberger) Sentinel</b>	<b>GE kV2/kV2c</b>
01	TIM - OTHER ERROR	DISABLED	MV90 Masterfile configuration does not match the meter configuration. ie: # of channels .	1. The MV90 Password #1 field is not the Read/Write or ReadOnly password of the meter.			
				2. Attempting to perform a WRITE DATE/TIME function with the ReadOnly password.			
				3. MV90 Masterfile configuration does not match the meter configuration. ie: # of channels , int/hr , etc .			
				4. The MV90 Reader Password does not match the Q1000 Meter Address . This field must contain the Q1000 Meter Address for the meters port that is used for communicating to the IMO's MV90 system.			
07	TIM - RECORDER CONFIGURATION DOES NOT MATCH TIM BLOCK CONFIGURATION	DISABLED		The MV90 UNIT ADDRESS field is incorrect. The UNIT ADDRESS field defines the Q1000 load profile configuration that MV90 will retrieve. In this particular case, the MV90 system was attempting to retrieve a load provile configuration that was not configured in the meter. As per the IMO Q1000 Framework, load profile configuration #1 is the revenue billing profile. The UNIT ADDRESS field must be blank or set to 1 to retrieve this load profile.		MV90 Masterfile configuration does not match the meter configuration. ie: # of channels, int/hr, etc .	
08	TIM - INVALID TIM PARAMETER	DISABLED	Entry in Password 1 field > 8 characters.				
09	TIM - TIME DIFF. OUT OF BOUNDS	DISABLED					
10	TIM - ID MISMATCH	DISABLED	The MV90 Device ID field does not match the ION Factory_Module.TAG2 .	The MV90 Device ID field does not match the Q1000 Unit ID .		The MV90 Device ID field does not match the Sentinel Unit ID .	The MV90 Device ID field does not match the kV2/kV2c Meter ID .
21	COMMUNICATIONS - OTHER ERROR	ENABLED					

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22	COMM. I/O TIMEOUT		1. The <b>MV90 Password #2</b> field does not match the <b>ION Unit ID</b> for the port that is being used for MV90 communications.	Typical <b>MV90 system error</b> when MV90 attempts to connect to a <b>non Q1000 device type</b> .	1. The <b>MV90 Password #1</b> field contains the meters <b>ReadOnly</b> password and the MV90 system attempts to perform an <b>Autotimeset</b> .	1. Typical <b>MV90 system error</b> when MV90 attempts to connect to a <b>non Sentinel device type</b> .  2. Sentinel Meter's Event Log is full and is unable to record the time set event when MV-90 requests a Time Set	Typical <b>MV90 system error</b> when MV90 attempts to connect to a <b>non kV2/kV2c device type</b> .
		<b>ENABLED</b>	2. Typical <b>MV90 system error</b> when MV90 attempts to connect to a <b>non ION device type</b> .		2. Typical <b>MV90 system error</b> when MV90 attempts to connect to a <b>non Alpha device type</b> .		
					3. <b>MV90 masterfile baud rate</b> does not match the <b>Alpha baud rate</b> .		
23	COMM. - CRC/CHECKSUM ERROR	<b>ENABLED</b>					
24	COMM. PROTOCOL ERROR		The <b>MV90 Password #1</b> field is not the correct password to read the meter. Please refer to the IMO ION Framework Document.	Possible <b>MV90 system error</b> when MV90 attempts to connect to a <b>non Q1000 device type</b> .			MV-90 attempted to access the meter with an invalid entry in the "Reader Password" field.
		<b>ENABLED</b>	Loss of Carrier - failed communications				
25	COMM. - PORT ERROR	<b>ENABLED</b>					
26	COMM. - SECURITY ERROR	DISABLED	Attempted to Access Meter or request Time Set with CORRECT "Phone Password 2" entry but incorrect "Phone Password 1".		The <b>MV90 Password #1 and Password #2</b> field (if populated) is not the Alpha meters password.		MV-90 attempted to access the meter with an invalid entry in the "Reader Password" field.
27	COMM. - DIAL ERROR / NO ANSWER	<b>ENABLED</b>					
28	COMM. - CARRIER SIGNAL LOST	<b>ENABLED</b>					
40	COMMUNICATIONS - NOT DEFINED	DISABLED					
41	SSDR - OTHER ERROR	DISABLED		MV-90 unable to complete DBPOST operation. MV-90 call fails and will not Retry.			
43	SSDR - ROM FAILURE	DISABLED					
47	TIME OUT OF TOLERANCE - FUNCTION NOT COMPLETED	DISABLED	MV-90 attempted to do an Auto Timeset but was not successful. Itron investigating root cause 2006-02-15 to provide more information.				
50	SSDR - NO NEW DATA TO READ	DISABLED					

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56	SSDR - RECORDER DATA STOP TIME DOES NOT MATCH CALC.D	DISABLED					
	OTHER		<p>1. <b>FAILED TIME SETS</b> - If MV90 attempts an <b>AUTOTIMESET</b> and the meters <b>time synchronization permission</b> is not set to the comm port used for IMO communications, the MV90 system will not return any error codes, indicating that a successful time set had occurred. <b>Time synchronization will not occur.</b></p>				
			<p>2. <b>FAILED TIME SETS</b> - If MV90 attempts an <b>AUTOTIMESET</b> and <b>time synchronization permission</b> has not been assigned to the IMO password, the MV90 system will not return any error codes, indicating that a successful time set has been performed. <b>Time synchronization will not occur.</b></p>				
			<p>3. <b>FAILED TIME SETS</b> - Return Code 47. Currently under investigation with the IESO and Itron.</p>				