

Tips for debugging Emerson ROC TLP configuration errors

The Cirrus Link [default TLP Definitions and EFM Mapping files](#) can be used as a starting point for configuring the EFM Emerson ROC module.

Once you have customized your configurations, you will likely encounter some issues and the following logged errors should give you clues on where to focus to resolve these issues.



For debugging, break out your poll groups into smaller groups that poll at different rates as a strategy to help isolate issues.

Internally the driver 'optimizes' polls to maximize data efficiency. For example, if you have 10 TLPs that are all polled every minute - all of those will be included in a single poll for efficiency. However if one of them fails, they all fail because the response from the ROC turns into an error response. If you modified the 10 TLPs to be in 5 groups of 2 all polled at different rates, only two of the TLPs would fail assuming only one TLP was actually problematic.

If you have two different poll groups that use the same poll rate, those will still be optimized. So, for this strategy to work you must use different poll rates between the groups. Also, this is a suggestion for isolating the config issues and, once everything is cleaned up, you can set up your poll groups as you see fit.

Logger: com.cirruslink.emersonroc.EmersonRocDriver

Error examples:

```
['M-205' 10.0.40.169:4000] No Orifice meter configuration found at logical number 2
['M-205' 10.0.40.169:4000] No Orifice meter configuration found at logical number 3
```

Logger: com.cirruslink.emersonroc.protocol.model.opcode.OpCodeDataContainer

Error examples:

```
Failed to parse TLPs for pointType=7 and parameterNumber=178. Enable 'TRACE' for details.
Failed to parse out TLP Array. Enable 'DEBUG' for details.
```

Logger: com.cirruslink.emersonroc.protocol.model.point.DynamicPointTypeParameter

Error examples:

```
Invalid length: 4 for DataType: UINT16 - changing to default length: 2
Invalid length: 1 for DataType: FL - changing to default length: 4
Invalid length: 5 for DataType: UINT32 - changing to default length: 4
```

Logger: com.cirruslink.common.util.exception.CirrusException

Error examples

```
Error handling TLPs in the template. Check the TLP definitions for this device and verify the following TLPs are defined. [196,1,25]
```

```
Error handling TLPs in the template. Check the TLP definitions for this device and verify the following TLPs are defined. [196,1,26], [196,1,30], [196,1,31], [196,1,32], [196,1,33], [196,1,34], [196,1,39], [196,1,40], [196,1,41], [196,1,42], [196,1,43], [196,1,44], [196,1,45], [196,1,46], [196,1,47], [196,1,48], [196,1,49], [196,1,50], [196,1,51], [196,1,52], [196,1,53], [196,1,54], [196,1,59], [196,1,60], [196,1,68], [196,1,72], [196,1,73], [196,1,75], [196,1,76], [196,1,78], [196,1,79], [196,1,80], [196,1,86], [196,1,87], [196,1,90], [196,1,91], [196,1,94], [196,1,95], [196,1,96], [196,1,97], [196,1,140], [196,1,141], [196,1,142], [196,1,143], [196,1,144], [196,1,145], [196,1,146], [196,1,147], [196,1,148], [196,1,149], [196,1,150], [196,1,151], [196,1,160], [196,1,161], [196,1,162], [196,1,186], [196,1,186], [196,1,187], [196,1,188], [196,1,191], [230,1,40]
```



To change logging levels, go to the Gateway's **Status > Diagnostics > Logs** page and click on the **Settings** [blocked URL](#) icon.

On the Log Configuration popup that will open, search for the logger name in the Filter box, and select the desired logging level from the dropdown to the right of the logger name