

## Tigo Energy Maximizer coupling with Modules having Tyco SOLARLOK connectors

Our Maximizer ES product line provides an option to mate to modules that have Tyco SOLARLOK couplers. The SOLARLOK coupler has five versions of the coupler:

1. Male connector, neutral keying
2. Male connector, positive keying
3. Male connector, negative keying
4. Female connector, positive keying
5. Female connector, negative keying

This variety can lead to incompatibility issues with a small percentage of module manufacturers that use the SOLARLOK connectors. This document is provided to assist in making sure the modules have proper SOLARLOK connector types to mate with the Tigo Energy Maximizers using the SOLARLOK option.

Tigo Energy MM-ES model numbers ending in -5WL or -5SL have Tyco SOLARLOK connectors at the input side to mate with the module outputs. The MM-ES50-5WL is an example of a Maximizer model that has SOLARLOK input connectors.

*Figure 1* shows the specific SOLARLOK connectors used at the inputs to the MM-ES-5WL or any Maximizer ending in -5WL or -5SL. The arrows point out the keying. The positive side of the module connector mates with the Female Plus and the negative side of the module connector mates with the Male Neutral.

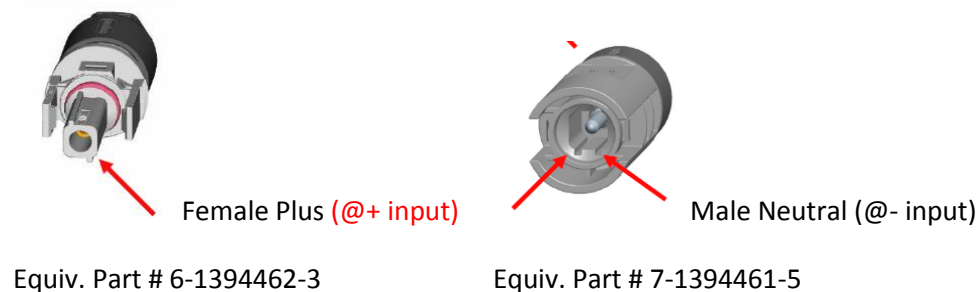


Figure 1

*Figure 2, 3 & 4* show the combinations of Module connectors that will mate with the above MM-ES-5WL connectors.

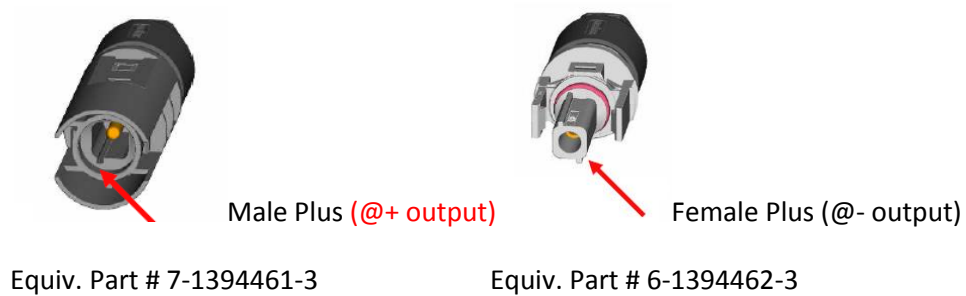


Figure 2

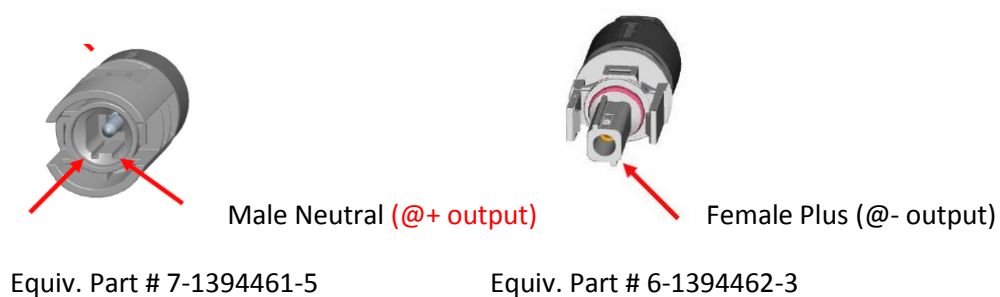


Figure 3

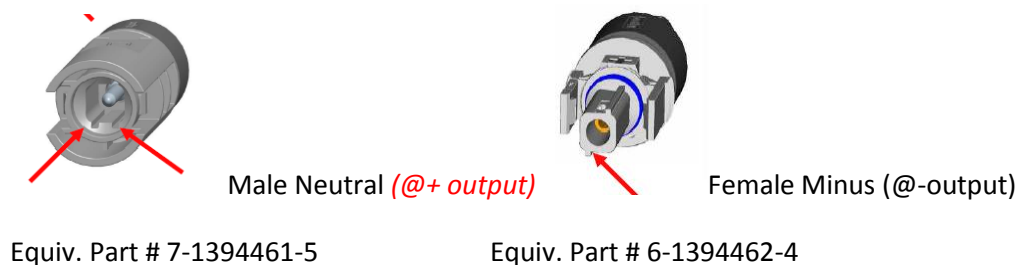


Figure 4

Figure 5 shows an example of a combination of connectors on some modules that will not work if connected to a Maximizer. In fact, while the connectors will mate together, this will result in connecting the modules to the Maximizer in reverse polarity. This happens because the Male Neutral connector can accept both positive and negative keying. The Maximizer will not work and could possibly be damaged. **Do not connect a module of this type to a Maximizer.**

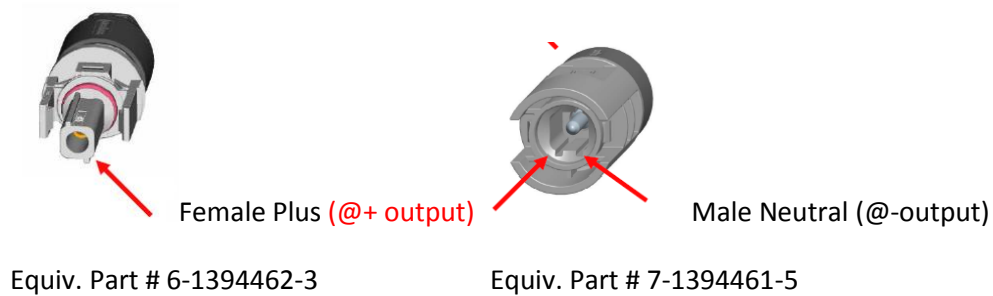


Figure 5

At present we are aware of at least two module manufacturers that use this SOLARLOK connector configuration. The manufacturers are Siliken and Symphony Energy. Maximizers are not compatible with this panel type if the panel is using SOLARLOK connectors. We recommend getting the modules with MC4 style connectors, instead.

Figure 6 shows an example of a combination of connectors if used would also result in reverse polarity. Tigo Energy is not aware of any module manufacturer using this combination. The Maximizer will not work and could possibly be damaged if used with this combination. **Do not connect a module of this type to a Maximizer.**

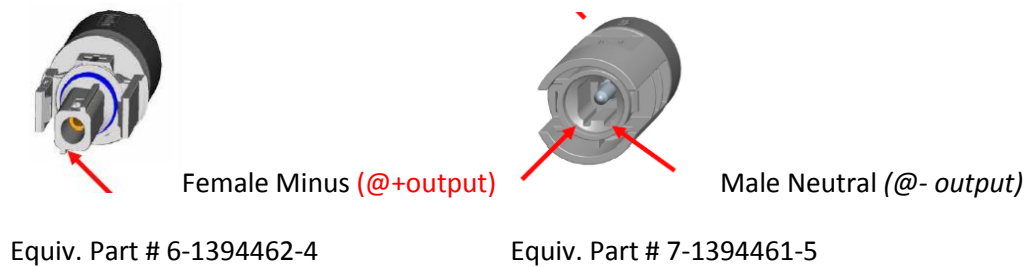


Figure 6

Figure 7 shows an example of a Male Minus SOLARLOK. If the module has this connector on either of the outputs it will not physically mate with a Maximizer. We are not aware of any Module manufacture using this connector on their modules.



Figure 7