The Multiplex Flex I/O Module is a member of Intellitec’s Programmable Multiplex Control family. It works in combination with the PMC CPU or the 160 channel IPX master and other standard, semi-custom, or custom I/O modules. The module can be used on either 12 or 24 volt systems.

The module provides power switching and distribution with electronic overload protection. The module provides a total of 24 input channels and 38 output channels. Eighteen of the input channels are configured as high-side inputs and the remaining 6 are configured as low-side inputs. Twenty-four of the output channels are rated up to 3A, 12 channels up to 10A, and 2 channels up to 20A. Switching is accomplished via long-life field effect transistors. Each output channel may be assigned to any of the 160 channels on a PMC loop. Outputs may be paralleled to provide greater current capability. Total current of all the output channels may not exceed 80 amps.

Module Programmability
A number of parameters of the module are user programmable to provide a great deal of flexibility in its application. These parameters are set using a GUI on a PC and loaded into the module through an on-board port. This program is available at www.Intellitec.com. A programming adapter harness is available from Intellitec (part no. 11-01039-000). Each output channel is preset from the factory to an anticipated minimum load value. The programmable parameters include:

- Channel allocation for each input and output
- Threshold and channel allocation for under current warning
- Threshold and channel allocation for over current warning

Overload / Underload Protection
The module includes electronic overload protection. The module will monitor output current of each channel and shut down that channel if the current is higher than set in the configuration. To reset the output, the signal to that channel must be turned off and back on again.

The module also includes load undercurrent detection and protection. If the load falls below the programmable minimum current, the module will report that low current situation on the Diagnostic Display.

Output Current Readout
The module has the ability to measure the actual current supplied to each load. This analog data is available to be read out via the computer connection used for programming.

LCD Diagnostic Display
The Module includes an on-board LCD diagnostic display to aid in the servicing of the associated system. The display indicates the current status of all channels. The status may be On, Off, Overload, Underload, or Short. The display will also indicate network communications faults. The information from each module may also be transmitted to an external display panel used to alert the driver or service personnel.

Module Dimensions
11.5” x 5.75” x 1.0” (290mm x 145mm x 25mm) (approx)

Mating Connectors
J1, AMP 776164-1    J2, AMP 776164-4
J1/J2 Contacts: 770854-1    Plugs: 770678-1
J5/J6: 1/4” “Fast-on”
Battery: 5/16” Ring Terminal

www.intellitec.com
1485 Jacobs Rd
Deland, Florida 32724
386-738-7307
### Intellitec 00-01039-000
#### Multiplex Flex I/O Module

**Specification**
- Module Part number: 00-01039-000
- Vehicle Voltage: 8V to 31V
- Max Module Current: 80 Amps Maximum

<table>
<thead>
<tr>
<th>Terminal</th>
<th>Function</th>
<th>Terminal</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low Current Outputs (3A max. 18 AWG min wire size.):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J1-1</td>
<td>Output 4</td>
<td>J2-1</td>
<td>Output 16</td>
</tr>
<tr>
<td>J1-2</td>
<td>Output 3</td>
<td>J2-2</td>
<td>Output 15</td>
</tr>
<tr>
<td>J1-3</td>
<td>Output 2</td>
<td>J2-3</td>
<td>Output 14</td>
</tr>
<tr>
<td>J1-4</td>
<td>Output 1</td>
<td>J2-4</td>
<td>Output 13</td>
</tr>
<tr>
<td>J1-5</td>
<td>Output 8</td>
<td>J2-5</td>
<td>Output 20</td>
</tr>
<tr>
<td>J1-6</td>
<td>Output 7</td>
<td>J2-6</td>
<td>Output 19</td>
</tr>
<tr>
<td>J1-7</td>
<td>Output 6</td>
<td>J2-7</td>
<td>Output 18</td>
</tr>
<tr>
<td>J1-8</td>
<td>Output 5</td>
<td>J2-8</td>
<td>Output 17</td>
</tr>
<tr>
<td>J1-9</td>
<td>Output 12</td>
<td>J2-9</td>
<td>Output 24</td>
</tr>
<tr>
<td>J1-10</td>
<td>Output 11</td>
<td>J2-10</td>
<td>Output 23</td>
</tr>
<tr>
<td>J1-11</td>
<td>Output 10</td>
<td>J2-11</td>
<td>Output 22</td>
</tr>
<tr>
<td>J1-12</td>
<td>Output 9</td>
<td>J2-12</td>
<td>Output 21</td>
</tr>
<tr>
<td><strong>Inputs (20 AWG min wire size.):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J1-13</td>
<td>Input 1</td>
<td>J2-13</td>
<td>Input 13</td>
</tr>
<tr>
<td>J1-14</td>
<td>Input 2</td>
<td>J2-14</td>
<td>Input 14</td>
</tr>
<tr>
<td>J1-15</td>
<td>Input 3</td>
<td>J2-15</td>
<td>Input 15</td>
</tr>
<tr>
<td>J1-16</td>
<td>Input 4</td>
<td>J2-16</td>
<td>Input 16</td>
</tr>
<tr>
<td>J1-17</td>
<td>Input 5</td>
<td>J2-17</td>
<td>Input 17</td>
</tr>
<tr>
<td>J1-18</td>
<td>Input 6</td>
<td>J2-18</td>
<td>Input 18</td>
</tr>
<tr>
<td>J1-19</td>
<td>Input 7</td>
<td>J2-19</td>
<td>Input 19</td>
</tr>
<tr>
<td>J1-20</td>
<td>Input 8</td>
<td>J2-20</td>
<td>Input 20</td>
</tr>
<tr>
<td>J1-21</td>
<td>Input 9</td>
<td>J2-21</td>
<td>Input 21</td>
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<tr>
<td>J1-22</td>
<td>Input 10</td>
<td>J2-22</td>
<td>Input 22</td>
</tr>
<tr>
<td>J1-23</td>
<td>Input 11</td>
<td>J2-23</td>
<td>Input 23</td>
</tr>
<tr>
<td>J1-25</td>
<td>Input 12</td>
<td>J2-25</td>
<td>Input 24</td>
</tr>
<tr>
<td><strong>Medium Current Outputs (10A max. 16 AWG min wire size.):</strong></td>
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<td></td>
<td></td>
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<tr>
<td>J1-24</td>
<td>Output 25</td>
<td>J2-24</td>
<td>Output 31</td>
</tr>
<tr>
<td>J1-26</td>
<td>Output 26</td>
<td>J2-26</td>
<td>Output 32</td>
</tr>
<tr>
<td>J1-28</td>
<td>Output 27</td>
<td>J2-28</td>
<td>Output 33</td>
</tr>
<tr>
<td>J1-30</td>
<td>Output 28</td>
<td>J2-30</td>
<td>Output 34</td>
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<tr>
<td>J1-32</td>
<td>Output 29</td>
<td>J2-32</td>
<td>Output 35</td>
</tr>
<tr>
<td>J1-35</td>
<td>Output 30</td>
<td>J2-35</td>
<td>Output 36</td>
</tr>
<tr>
<td><strong>High Current Outputs (20A max. 14 AWG min wire size.):</strong></td>
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<td></td>
</tr>
<tr>
<td>J5</td>
<td>Output 37</td>
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</tr>
<tr>
<td>J6</td>
<td>Output 38</td>
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</tr>
<tr>
<td><strong>Other (20 AWG min wire size.):</strong></td>
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</tr>
<tr>
<td>J1-27</td>
<td>CANL</td>
<td>J2-27</td>
<td>CANH</td>
</tr>
<tr>
<td>J1-29</td>
<td>NC</td>
<td>J2-29</td>
<td>NC</td>
</tr>
<tr>
<td>J1-31</td>
<td>Ground</td>
<td>J2-31</td>
<td>Ground</td>
</tr>
<tr>
<td>J1-33</td>
<td>IPX +</td>
<td>J2-33</td>
<td>RS-232 RX</td>
</tr>
<tr>
<td>J1-34</td>
<td>IPX -</td>
<td>J2-34</td>
<td>RS-232 TX</td>
</tr>
</tbody>
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