Tii's Angle Driver® AD-01W-FS is specifically designed to protect tomorrow's high-speed digital networks, such as ADSL2+/VDSL2 technology against damage caused by electrical surges.

**KEY PRODUCT BENEFITS**

- Optimal performance for IPTV video over DSL due to low line to ground capacitance, providing significantly better DSL Insertion Loss than most competitive products
- AD-01W-FS consists of a heavy duty three-electrode gas tube surge arrester, failshort device and Gel-Sealed IDC (Insulation Displacement Connection) type connectors for terminating all wires in one completely self-contained unit
- Tii’s “11” tube provides unsurpassed lightning protection
- IDC connections require no stripping of the wire insulation for terminating
- Module has two ports for small-gauge (22-26 AWG) wire terminations and two ports designed to accept large-gauge (18-19 AWG) or small-gauge (22-24 AWG) wire for tip/ring connections, all of which are environmentally sealed
- May be employed in a variety of single and multiple pair Network Interface and station protector housings
- Can be used to retrofit/service upgrades of existing assemblies already installed in the field
- Unit is supplied with a unique, universal ground tab which may be snapped off to allow for multiple mounting arrangements

**INDUSTRY STANDARDS**

- Fully compatible and exceeds the transmission requirements of Telcordia specification GR-974-CORE for high-speed digital networks
- Tii Angle Driver® AD-01W-FS complies with the “No back-up device” section of Telcordia GR-1361-CORE and has been fully tested by Telcordia and meets the temperature aging and cycling performed at a modified (increased severity) 150Vdc bias for protectors deployed in DSL applications. The resulting lower capacitance and increased reliability make the protector an excellent choice for Digital Subscriber Line (DSL) applications. It exceeds the transmission requirements for high-speed digital networks
- Surge handling and life capabilities of the Angle Driver® AD-01W-FS meet the objectives of Telcordia GR-1361-CORE
- Angle Driver® AD-01W-FS meets the requirements of Section 5, “Environmental Requirements, Severe Climatic Conditions” and Section 6.2 “Environmental, Severe Climatic and Flooded Conditions” of Telcordia GR-49-CORE Issue 2, “Generic Requirements for Outdoor Telephone NIDs”
- Meets Sealing Requirements of Telcordia TR-NWT-000975
- Meets Generic Requirements For IDC Cross-Connect & Terminal Blocks of Telcordia TR-NWT-001195
- Listed to UL 497
### SPECIFICATIONS

**DC Breakdown Voltage (L-G) @ 2000 V/sec**  
265-600V DC

**Impulse Reset:** 135Vdc @200mA  
<150 mS

**Maximum Single Impulse Discharge Current,**  
8/20 waveform: 20kA  
10kA/Side Simultaneously

**Impulse Life:**  
10 Amp, 10/1000μsec waveform: 1500 Surges Minimum  
100 Amp, 10/1000μsec waveform: 100 Surges Minimum  
300 Amp, 10/1000μsec waveform: 50 Surges Minimum

**AC Discharge Current**  
10 Amp, 1 Second: 20 Operations Minimum  
1 Amp, 1 Second: 60 Operations Minimum

**Capacitance (L-G)**  
10 pF Typical

**Capacitance Imbalance (L-G)**  
<1 pF Typical

**Aging, Temperature/Humidity Cycling with Surge**  
150 Volts DC Bias

**Insertion Loss 0.2 – 30MHz**  
<0.1dB

**Return Loss @30MHz**  
>15dB

**Impulse Breakdown voltage (L-G)**  
@100V/μsec. 500V Typical,  
@1KV/μsec. 750V Maximum  
750V Typical

**Insulation Resistance**  
@50Vdc, 10MA: 100 Megohms Minimum

### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD-01W-FS</td>
<td>Heavy Duty Totel Failsafe® TFS® Gel-Sealed Station Protector With Snap-Off Ground Tab</td>
</tr>
</tbody>
</table>