# technetix

# ET-1 port tap range





- High quality 1-way installation taps
- Modem Safe<sup>™</sup> surge protection and intermodulation reduction solution
- High return loss
- CPD Safe<sup>™</sup> NiSn plated housing, silver plated beryllium copper F-contacts
- Easy to install compact and stackable in-line model
- 7 mm stand-off space to fit cable underneath
- Grounding block option available
- Exceeds EN Class A screening requirements



## **Overview**

Products within the Ecoline range excel both in electrical and mechanical performance. Though designed for use within indoor environments, they are also specified for use within street-side plant.

Ecoline products are designed for easy installation, have a compact housing and some models are stackable. All F-connectors used on Ecoline products meet the SCTE standards (ANSI SCTE 02 2006). The F-inner spring is designed to connect coax cables with an inner core of 0.56 to 1.30 mm. It retains this elasticity and provides effective clamping force even when varying thicknesses of inner conductor are connected in succession.

The intermodulation performance, which is an important factor in high level return path signals, has been greatly improved through a newly developed ferrite and specially designed circuits.

The high frequency shielding exceeds Class A requirements (EN-50083-2:2006) over the whole frequency range from 5 MHz to 1000 MHz.

### **Modem Safe**

Modem Safe is a highly effective surge protection solution for sensitive network and in-home CPE. Based on passive circuits, the technology does not rely on discharge tubes, extending the lifespan of the solution.

- Blocks high and low voltage pulses and unwanted DC voltages
- Prevents internal ferrites within the product from becoming magnetised (avoiding deterioration in the performance of CPE)
- Drives fewer reported faults
- Improves customer service
- Reduces truck rolls

#### **CPD Safe**

CPD (Common Path Distortion) is well known for producing signal interference on networks. It is caused by electrolytic corrosion or the oxidisation of dissimilar metals when in close contact. CPD Safe technology protects against CPD.

- Removes a primary cause of CPD
- Reduces signal interference on the network
- Drives fewer reported faults
- Reduces truck rolls
- Improves customer service



# ET-1 port tap range

# **Specifications**

Return loss (dB, typ)  All ports 550-1006 6.9 7.5 8.4 9.5 10.2 11.5 12.3 13.5 15.4  Return loss (dB, typ)  25.15 25.2 27.6 27.2 26.6 28.8	16dB	12dB	3 20dB	24dB
Return loss (dB, typ)	ур : Мах	Тур Мах	Лах Тур Ма	Тур Мах
Solution (dB)	.5 1.0	0.6 1.0	1.0 0.6 1.0	0.5 1.0
Solution (dB)	.5 1.0	0.6 1.0	1.0 0.5 1.0	0.4 1.0
Pattern   Pat	.5 1.0	0.7 1.1	1.0 0.5 1.0	0.4 1.0
Return loss (dB, typ)	.6 1.0	0.8 1.2	1.0 0.5 1.0	0.4 1.0
In to Tap   5-65   7.4   8.0   8.9   10.0   10.4   12.0   12.3   14.0   15.8	.7 1.1	1.0 1.4	1.1 0.6 1.0	0.6 1.0
Return loss (dB, typ)	.7 1.1	1.0 1.4	1.1 0.6 1.0	0.6 1.0
Return loss (dB, typ)	5.8 18.0	12.3 14.0	8.0 19.4 22.	23.8 26.0
Return loss (dB, typ)	5.6 17.5	12.2 13.5	7.5 19.2 21.	23.7 25.5
15-550   25.2   27.6   27.2   26.6   28.5	5.4 17.5	12.3 13.5	7.5 19.6 21.	23.6 25.5
Solution (dB)	26.2	28.8	26.5	28.7
Tap to Tap   Tap to Tap   S-65   S-550   S-550   Shielding effectiveness (dB)²   S-300   S-3	25.4	26.6	26.6	27.8
Directivity	24.9	24.6	24.9	25.4
Directivity	yp i Min	Typ Min	Min Typ Mi	Typ Min
Directivity				
Directivity	N/A			
65-550   30.0   26.0   29.5   28.0   28.7   30.0   34.1   32.0   37.1	:	:	:	;
Screening efficiency (dB)1   5-300   300-470   300-470   300-470   300-470   300-1000	:		:	
Screening efficiency (dB)1   5-300   >95				
300-470   >90	2.7 31.0	:	37.1 33.	37.4 35.0
470-950   >85				
Shielding effectiveness (dBi)²         5-300 Avg 130 Avg 120           Intermodulation p+q (dBc, min)³         -115.0           Surge Class conformance⁴         All ports         1 kV 1.2/50μs           Connectors         All ports         F-female           Plating Material         Housing F-spring         NiSn plated zinc die-cas Silver plated beryllium copposition				
Shielding effectiveness (dBi)²     5-300 300-1000     Avg 130 Avg 120       Intermodulation p+q (dBc, min)³     -115.0       Surge Class conformance⁴     All ports     1 kV 1.2/50μs       Connectors     All ports     F-female       Plating Material     Housing F-spring     NiSn plated zinc die-cas Silver plated beryllium copper.				
(dBi)²     300-1000     Avg 120       Intermodulation p+q (dBc, min)³     -115.0       Surge Class conformance⁴     All ports     1 kV 1.2/50µs       Connectors     All ports     F-female       Plating Material     Housing F-spring     NiSn plated zinc die-cas Silver plated beryllium copper				
Intermodulation p+q (dBc, min)³     -115.0       Surge Class conformance⁴     All ports     1 kV 1.2/50μs       Connectors     All ports     F-female       Plating Material     Housing F-spring     NiSn plated zinc die-cas Silver plated beryllium copp				
Surge Class conformance <sup>4</sup> All ports 1 kV 1.2/50µs  Connectors All ports F-female  Plating Material Housing NiSn plated zinc die-cas Silver plated beryllium copp				
Connectors     All ports     F-female       Plating Material     Housing F-spring     NiSn plated zinc die-cas Silver plated beryllium copp				
Plating Material Housing NiSn plated zinc die-cas Silver plated beryllium copy	· ·			
F-spring Silver plated beryllium cop				
. Company of the comp				
impedance (omit, typ) 75	opper		r	
Dimensions (mm)				
Dimensions (mm)         L x H x D         58.4x49.3x15.5           Equipment Approval         CE		8.4x49.3x15		

#### Remarks

1	Tested according to EN 50083-2 2006
2	Tested according to SCTE IPS-TP403
3	Two carriers (50 & 55MHz),out to in, @ 120dBµV, after 10 pulses (25V/1,2µS rise time/500µS duration) at all ports
	Two carriers (50 & 55MHz), out to in, @ 120dBµV, after 1 pulse 1KV (1,2µS risetime/50µS fall time) at Input.
4	Tested according to IEC 61000-4-5 2005
	DC power blocking all ports

Measurements taken at room temperature

### Ordering information

(without grounding block)

Item Name	Article number
ET-1-6+/N	10430074
ET-1-8+/N	10430075
ET-1-10+/N	10430076
ET-1-12+/N	10430077
ET-1-16+/N	10430078
ET-1-20+/N	10430080
ET-1-24+/N	10430019

#### (with grounding block)

Item Name	Article number
ET-1-6+/N-G	10430435
ET-1-8+/N-G	10430436
ET-1-10+/N-G	10430437
ET-1-12+/N-G	10430438
ET-1-16+/N-G	10430439
ET-1-20+/N-G	10430440
ET-1-24+/N-G	10430441

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