

## 4. Technical Specifications

For a listing of the card's electrical specifications, refer to Table 1. For a listing of the card's physical specifications, refer to Table 2.

**Table 1 Electrical Specifications (measured at 77°F or 25°C, 50% R.H.)**

Parameter	Specifications		
	7501-16A	7501-16B	7501-16C
ISOLATION DATA			
Isolation resistance	100 000 MΩ	100 000 MΩ	100 000 MΩ
Metallic surge	3 kV max	3 kV max	3 kV max
Insulation voltage	30 kVrms (42 kV peak)	30 kVrms (42 kV peak)	30 kVrms (42 kV peak)
SUPPLY VOLTAGE	Floating: 105 to 150 V dc	Grounded: -21 to -27 V dc	Grounded: -42 to -56 V dc
SUPPLY CURRENT	55 mA maximum	350 mA maximum	125 mA maximum
POWER DISSIPATION INSIDE SHELF	6.2 W maximum	8.5 W maximum	6 W maximum
MAXIMUM VOLTAGE TIP TO RING	±150 V dc	±150 V dc	±150 V dc
MAXIMUM LOOP CURRENT	±100 mA continuous	±100 mA continuous	±100 mA continuous
MAXIMUM LOOP POWER	5W	5W	5W
RESPONSE TIME (subscriber to line, or line to subscriber)	<1 ms	<1 ms	<1 ms
SERIES RESISTANCE	Series resistance of 25Ω is added to the telephone loop.	Series resistance of 25Ω is added to the telephone loop.	Series resistance of 25Ω is added to the telephone loop.

Parameter	Specifications		
IMPEDANCE REFLECTION	Impedances on either side appear on the opposite side multiplied by 90% to 110% within the pass band.	Impedances on either side appear on the opposite side multiplied by 90% to 110% within the pass band.	Impedances on either side appear on the opposite side multiplied by 90% to 110% within the pass band.
ON-HOOK DATA			
Terminal resistance	≥ 200 KΩ at ±100 V dc	≥ 200 KΩ at ±100 V dc	≥ 200 KΩ at ±100 V dc
OFF-HOOK DATA (40 mA dc)			
Longitudinal balance (CO Side)	>80 dB @ 60 Hz; >56 dB @ 4 kHz	>80 dB @ 60 Hz; >56 dB @ 4 kHz	>80 dB @ 60 Hz; >56 dB @ 4 kHz
Crosstalk with adjacent card	Better than -77dB from 300 to 3400 Hz measured at +10 dBm	Better than -77dB from 300 to 3400 Hz measured at +10 dBm	Better than -77dB from 300 to 3400 Hz measured at +10 dBm
Dial pulse distortion	<1% measured at 14 mA threshold (output duty cycle with respect to input duty cycle)	<1% measured at 14 mA threshold (output duty cycle with respect to input duty cycle)	<1% measured at 14 mA threshold (output duty cycle with respect to input duty cycle)
NOISE			
Impulse noise (both sides)	Less than 1 count in 30 minutes above 48 dBrc	Less than 1 count in 30 minutes above 48 dBrc	Less than 1 count in 30 minutes above 48 dBrc
Phase jitter (4-300 Hz)	<0.5°	<0.5°	<0.5°
Message circuit noise (quiet termination)	<30 dBrc	<30 dBrc	<30 dBrc
S/N ratio (C message filter)	50 dB at 0 dBm	50 dB at 0 dBm	50 dB at 0 dBm
SIGNAL			
Bandwidth (-3 dB)	200 to 4 kHz	200 to 4 kHz	200 to 4 kHz

**Table 2      Physical Specifications Model 7501-16A, B and C**

<b>Parameter</b>	<b>Specifications</b>
Operating temperature range	+32°F to +122°F (0°C to 50°C)
Relative humidity	95% (non-condensing)
Height	12" (30.48 cm)
Width	2" (5.08 cm)
Depth	7-7/16" (18.89 cm)
Weight	3.488 lbs (1.582 kg)