

OnLine® J Series Communication Line Protectors: provide solid state communications line protection designed to protect 21st century applications that use integrated circuitry as a component of their operation. From electronic commerce to seventh generation PBX environments, the J Series family will meet your demanding protection needs.

Eliminates harmful transients

System lockups, dropped calls, mis-dials, system memory loss, "no trouble found" service calls, power outages, shortened component life — these problems all result from high frequency interference. This interference can originate outside the premises in the form of lightning induced noise, or it can occur inside when the overall system grounding is inadequate.

ONEAC OnLine protectors prevent these fast-edged impulses from entering your system, yet allow lower frequency ring voltages and signals to pass through unobstructed. This unique ability to discriminate between harmful and desired signals allows OnLine protectors to suppress this interference more accurately at lower voltages.

Lasts longer on the job

ONEAC communication line protectors feature a more robust design. Using solid state technology, they are better able to withstand current and voltage surges than conventional gas tube protectors commonly found at the network interface. Which eliminates the cost and downtime of replacement due to nuisance failures.

Your bottom line

By removing electrical noise, ONEAC improves system reliability. Look at actual evidence. Switching over to a protection scheme using OnLine protectors with ONEAC power conditioners report an over 50% reduction in total trouble calls; 83% fewer service calls due to hardware problems; 70% fewer system resets; and 43% fewer calls in which no trouble was found. Reducing maintenance dispatches and improving customer service means improved earnings.

Ultimate assurance

Leading companies employ ONEAC OnLine communication line protectors in their installations for good reason. OnLine protectors provide greater assurance of system uptime and lower service costs than conventional protectors.



- **Robust/solid state overvoltage protection:** lasts longer in the field.
- **Patented transient filtering:** allows exceptionally low let-through performance for optimum protection of electronic systems.
- **Self-resetting sneak current protection:** eliminates overcurrent problems without creating unnecessary fuse replacements.
- **100 A surge impulse design:** provides longer lasting protection.
- **Simple installation:** convenient ground connection and wall mounting make installation a snap.
- **Models available for analog, digital and data lines.**
- **Safety approvals:** UL listed Primary (497), UL listed Secondary (497A), and cUL.
- **5-year warranty:** the best assurance of product quality and performance in the industry.
- **Manufactured under ISO 9001:** assures consistent quality and performance.
- **Free 24-hour technical support**

OnLine J Series Communication Line Protectors: Specifications

A variety of applications

Installed between the demarcation point and point of use, OnLine J Series communication line protectors eliminate the possibility for noise generated on outside telephone lines to enter systems through T1 connections, modems or faxes

ONEAC breaks the "Ring Voltage Barrier"

Conventional protectors (gas tube or solid state) are designed to clamp above the operating DC bias and the ring voltage level. The OnLine's ability to differentiate signals based on frequency permits the desired signals to pass while preventing transients from damaging semiconductor-based electronics.

Application	Part No.	Pairs Protected
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Analog: Standard Service — trunk lines, analog OPX stations with ring signal

6 position, 2 wire, 1 Pair	RJ-AP11	(3,4)
6 position, 4 wire, 2 Pair	RJ-AP14	(3,4; 2,5)
8 position, 8 wire, 4 Pair	RJ-AP45	(1,8; 2,7; 3,6; 4,5)

Analog and Digital: Services without ring signals

6 position, 2 wire, 1 Pair	RJ-DP11	(3,4)
6 position, 4 wire, 2 Pair	RJ-DP14	(3,4; 2,5)
8 position, 8 wire, 4 Pair	RJ-DP45	(1,8; 2,7; 3,6; 4,5)

ADSL: Services with local analog service

6 position, 2 wire, 1 Pair	RJ-AD11	(3,4)
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xDSL: Services without local analog service

6 position, 2 wire, 1 Pair	RJ-DC11	(3,4)
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T1 (DS1): Services T1/PRI

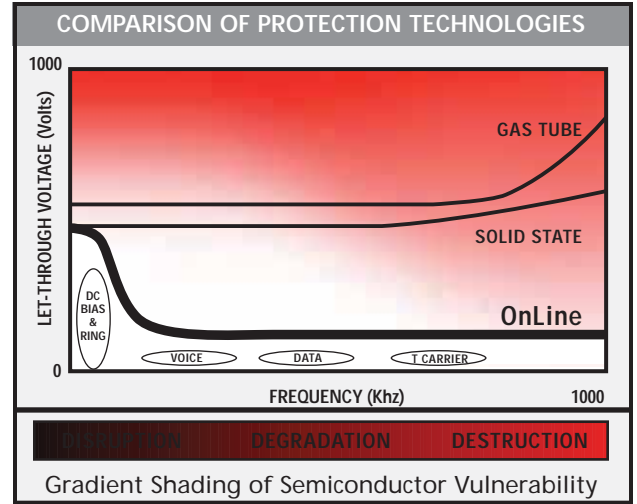
8 position, 4 wire	RJ-DP48C	(1,2; 4,5) opt. jumper 7&8 in to 7&8 out
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Subrate (DS0):

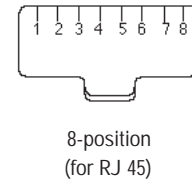
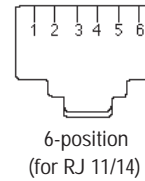
8 position, 4 wire	RJ-DP48S	(1,2;7,8)
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Digital OPX by vendor	Part No.
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Toshiba 24 V (1 pr)	RJ-DSP36
Toshiba 24 V (2 pr)	RJ-DSP36
Samsung 24 V (1 pr)	RJ-DSP36
Samsung 24 V (2 pr, 12 V/pr)	RJ-DSP20
Executone 24 V (2 pr, 12 V/pr)	RJ-DSP20
Nortel 24 V (1 pr)	RJ-DSP36
ROLM/Siemens 24 V (1 pr)	RJ-DSP36
NEC 48 V (1 pr)	RJ-DSP68
Fuji 48 V (1 pr)	RJ-DSP68
Mitel 48 V (1 pr)	RJ-DSP68



Jack openings



Part Number	RJ-AD11	RJ-APxx*	RJ-DC11	RJ-DPxx*	RJ-DP48C RJ-DP48S	RJ-DSP20	RJ-DSP36	RJ-DSP68
Impulse Voltage Performance 10/1000µs, 1500V, 100A Impulses:								
Let-through voltage - line to earth (typical/max.)	60 V/100 V	320 V/370 V	310 V/350 V	78 V/95 V	78 V/95 V	55 V/65 V	65 V/75 V	100 V/110 V
Let-through voltage - line to line (typical/max.)	60 V/100 V	150 V/250 V	100 V/150 V	70 V/105 V	70 V/105 V	55 V/65 V	65 V/75 V	100 V/110 V
DC Breakdown Voltage (0-1 kV @ 100 V/s):								
Line to earth (typical/range)	310 V/270-350 V	320 V/270-370 V	310 V/270-350 V	78 V/60-95 V	78 V/60-95 V	20 V/18-23 V	36 V/33-40 V	68 V/64-74 V
Line to line (typical/range)	310 V/270-350 V	640 V/540-740 V	310 V/270-350 V	155 V/120-190 V	155 V/120-190 V	20 V/18-23 V	36 V/33-40 V	68 V/64-74 V
Module Loop Resistance @ 25°C (each leg)	0.3 Ω min, 0.5 Ω max	12 Ω min, 18 Ω max	3 Ω min, 6 Ω max	3 Ω min, 6 Ω max	3 Ω min, 6 Ω max	≤1 Ω	≤1 Ω	≤1 Ω
Holding Current	≥260 mA	≥150 mA	≥150 mA	≥150 mA	≥150 mA	—	—	—
Response Time	<1 ns	<1 ns	<1 ns	<1 ns	<1 ns	<5ns	<5ns	<5ns
Insulation Resistance @ 12 VDC	>100 MΩ	>100 MΩ	>100 MΩ	>100 MΩ	>100 MΩ	>1 MΩ	>1 MΩ	>1 MΩ
Capacitance @ 12 VDC, 1 VAC, 10 kHz - 10 MHz								
Line to earth	<40 pf	<200 pf	<75 pf	<200 pf	<200 pf	<75 pf	<75 pf	<75 pf
Line to line	<40 pf	<200 pf	<150 pf	<200 pf	<200 pf	<75 pf	<75 pf	<75 pf
On State Voltage with 1 Amp RMS	<5 V	<5 V	<5 V	<5 V	<5 V	—	—	—
Overcurrent Protection (Sneak Current) @ 25° C								
Self resetting (ceramic PTC technology)	—	300 mA	300 mA	300 mA	300 mA	—	—	—
Non-resetting (time delay fuse)	750 mA	1 A	1 A	1 A	1 A	1 A	1 A	1 A

* "xx" denotes placeholders for 11, 14, or 45. See application chart above.

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