



## Introducing New Products: Power Line EM Adapters MSN15 and MSN17



### What are these new products?

MSN15 and MSN17 are the logical continuation of our well-established EMI Adapters MSN01 and MSN12. Here is a brief comparison:

- MSN15 is a “new” MSN12. It has much broader bandwidth (up to 200MHz vs. 30MHz in MSN12) and is designed to appeal to a wider range of customers, specifically those working with power line communication (PLC) and data security (yes, power line is yet another entry into your computers and servers in data centers).
- MSN17 is a “new” MSN01. It has all the features of MSN01 but with the wider bandwidth (150MHz) and it allows use of country-specific power cables making MSN17 much more applicable world-wide. MSN17 can be shipped with the cables of different standards—U.S., Schuko (European), U.K., and Australia/China.

Both MSN15 and MSN17 use the same enclosure as MSN12.

### Are these new products compatible with MSN01 and MSN12?

Due to requirements for the increased bandwidth the output signal had to be scaled 10:1, just like an oscilloscope probe. When using MSN15 and MSN17 with an oscilloscope, simply set input channel setting to 10:1 (for MSN01 and MSN12 it had to be 1:1). Otherwise, the signal would be the same as MSN01 and MSN12 up to 30MHz, after which MSN01 and MSN12 won't be able to provide much of signal, while MSN15 and MSN17 will – up to 200MHz and 150MHz accordingly. MSN15 and MSN17 will “see” more signals in a much wider range.

## Why did we do it?

Both MSN01 and MSN12 are successful products – what led to the addition of the new ones? Simply – new requirements of broader frequency range for new markets (power line communication—PLC) and improved convenience of use (MSN17 with its power plug options).

## What are the new expanded markets for MSN15 and MSN17?

One of such markets is PLC, or power line communication — a way to transmit and to receive data over existing power lines. You may be familiar with one of such applications—WiFi extenders that plug into electrical outlets and expand the range of WiFi throughout the building. This, however, is only one such example. “Smart Power” includes PLC for the interworking of distributed power control. PLC is not very visible to a casual observer, however it is very wide spread. PLC uses a number of international standards and our adapters cover absolute majority of them.

In addition to “regular” PLC, our existing EMI adapters found use in data security—power lines are a back-door entry into computers and servers. Existing users include governments, security firms, etc. The new generation of adapters covers much wider range for such data “snooping.”

We recommend MSN17 for all such applications simply because of convenience—a user doesn’t need to hold test leads by hand in the electrical outlet.

## Do MSN15 and MSN17 replace MSN01 and MSN12?

These new products are newer and better versions of MSN01 and MSN12 and they can be used instead of them. However, for applications where the new performance or new features are not required, customers may still use MSN01 and MSN12 without detriment.

## Are MSN01 and MSN12 now obsolete?

Not yet, but eventually they will be. We would like to move customers to new and better products. For those customers who have MSN01 and/or MSN12 “built into” their process, we will make these products available, at some point as special-order products, but we will try to encourage them to “upgrade” the performance.

## What else is new?

Both MSN15 and MSN17 are now CE certified. They are compliant with the latest IEC/EN safety standards – compliance certificate is on our web site in Library section. For compliance with new IEC/EN Standards MSN15 does not have LED indicating AC power (contact us if you interested in “fine details”). MSN01 and MSN12 are still safe products, it is just a matter of compliance with the “small print” requirements of new international standards

## Are these new products much more expensive?

The price for MSN15 and MSN17 reflects inflation, but overall the prices are quite within the range. End user price for MSN15 is US\$485.00; MSN17—US\$425.00. You can find distributor’s and demo prices in the separate document that we will be distributing.

## What is the availability of MSN15 and MSN17?

Both products are available now.

For more information please visit [www.onfilter.com](http://www.onfilter.com) and go to Measurements.

Please let your customers know about these new products, and let me know if you have any questions.

Vladimir Kraz  
President  
June 10, 2020