

Yesterday 100, today 200 –  
**AS-i Extension Plug doubles  
the length of the AS-Interface cable**



**Highlights that convince**

- The cable length of each AS-Interface segment is doubled from 100 to 200 meters
- More application possibilities exist with a higher degree of freedom when designing plants
- The network infrastructure costs are significantly reduced for large networks
- The AS-Interface network can be expanded up to max. 600 m with repeater
- Simple monitoring incorporates integrated undervoltage detection



# as-interface

Yesterday, 100 m was the limit. Now, that has all changed. Today, 200 m can be easily reached. This is because the new AS-i Extension Plug allows an AS-Interface segment to be expanded up to 200 m. Simply unique – especially when one considers the economics of it – as repeaters and a second power supply are not required. Thanks to the M12 connection, it can be simply and quickly connected with an IP67 degree of protection. An integrated undervoltage detection circuit monitors the AS-Interface voltage and a LED indicates whether the required voltage is still available at the end of the 200 m bus cable. AS-i Extension Plug – **for all of those that don't like half measures.**

[www.siemens.de/as-interface](http://www.siemens.de/as-interface)

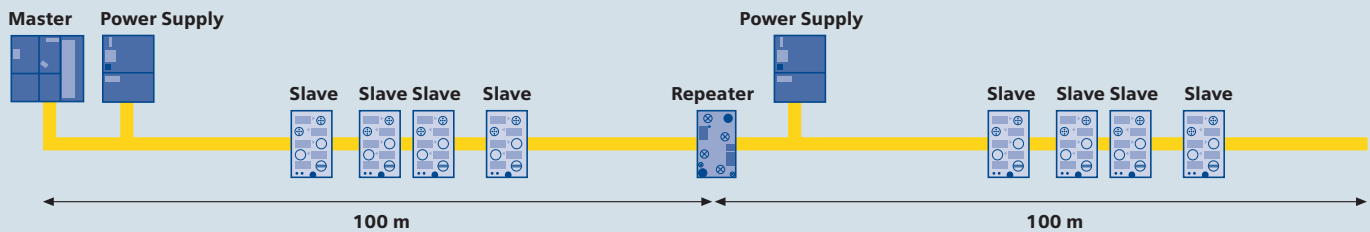
**SIEMENS**

## Function and connecting the AS-i Extension Plug

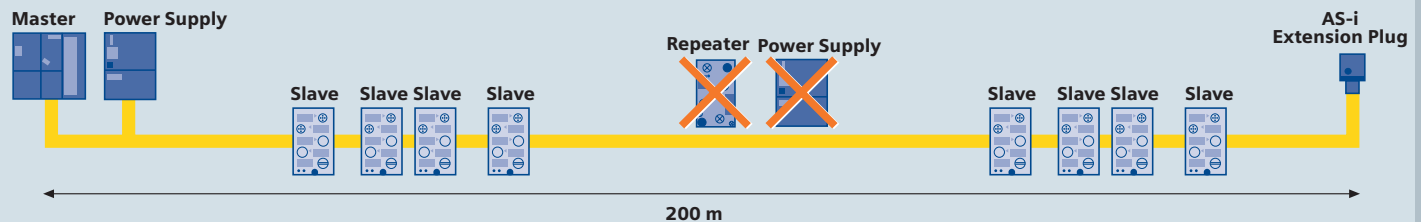
In order to configure an AS-Interface network with a cable length of up to 200 m, the AS-i Extension Plug is installed at a location in the network at the furthest point from the AS-Interface power supply. It is not necessary to position it precisely at the end of the cable. It is sufficient if the AS-i Extension Plug is connected within the last 10 m of cable. As with all AS-Interface networks, any network structure is possible using the AS-i Extension Plug (line, tree, star).

Only one AS-i Extension Plug is required per segment for tree and star structures. Depending on the extent of an AS-Interface segment and the current requirement, it must be ensured that the voltage drop along the AS-Interface cable is not too large. The AS-i Extension Plug has a voltage monitoring function so that all of the connected nodes can be simply monitored. A flashing green LED clearly indicates when the voltage level has fallen below the minimum requirement.

### Up until now, max. 100 m per segment



### Now, using the AS-i Extension Plug, a maximum of 200 m per segment

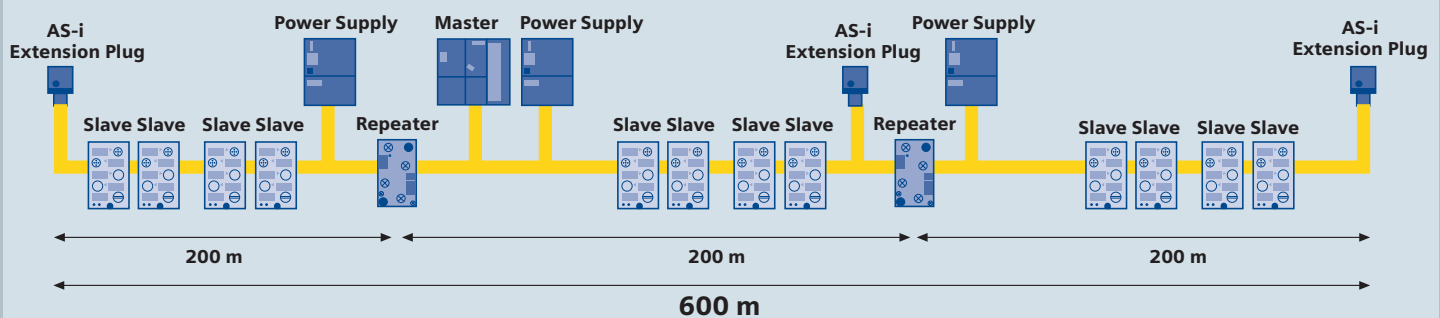


## Configuring large AS-Interface networks

The maximum possible cable length can be further increased by using repeaters. When repeaters and AS-i Extension Plug are used together, it is not possible to connect repeaters in series. This means that the maximum distance between the master and a slave

is 400 m and the maximum length is 600 m (master is located at the center of the network). Repeaters can be connected in parallel for a star topology with up to 200 m long segments.

### With AS-i Extension Plug, maximum 200 m per segment, only 1 repeater in series

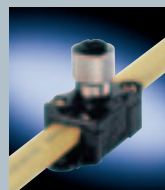


## Selection and ordering data



### AS-Interface Extension Plug

This doubles the cable length to 200 m per AS-Interface segment, IP67 degree of protection  
Order No.: **3RK1 901-1MX00**



### Accessory: AS-Interface M12 branch

Insulation piercing method to connect the AS-Interface cable – M12 socket to connect the Extension Plug, IP67 degree of protection  
Order No.: **3RX9 801-0AA00**