

CYLON® TECHNICAL BULLETIN NO. 455

Issue Date: 2nd December 2020

NEXUS Series included PSU and RS485 protection

Summary

The **NEXUS Series** Aspect Control Engines are now shipped with a suitable Power Supply Unit, and protective devices that must be attached to the RS485 ports. These items can also be bought separately if required.

Background

The hardware platform on which the **NEXUS Series** is based reported sensitivity to voltage surges on the RS485 connections. ABB Cylon has added devices that protect against any adverse effects of this sensitivity and must be installed.

Features

POWER SUPPLY

An appropriate Power Supply Unit is now shipped with each **NEXUS Series** device. Please note that this is the preferred method for powering **NEXUS Series** devices, and it is recommended that this is the only PSU that is used.

The included PSU is compatible with mains plugs in a specific market. The NEXUS device must be ordered with this in mind as follows:

•	NEXUS-264 with 2 x RS485 protector and US PSU	NEXUS-264-A	
•	NEXUS-264 with 2 x RS485 protector and \mathbf{UK} PSU	NEXUS-264-G	
•	NEXUS-264 with 2 x RS485 protector and Europe PSU	NEXUS-264-F	
•	NEXUS-2128 with 2 x RS485 protector and US PSU	NEXUS-2128-A	
•	NEXUS-2128 with 2 x RS485 protector and UK PSU	NEXUS-2128-G	
•	NEXUS-2128 with 2 x RS485 protector and Europe PSU	NEXUS-2128-F	
The PSU can also be purchased separately as follows:			

•	Replacement US PSU	1S9NT904
•	Replacement UK PSU	1S9NT902

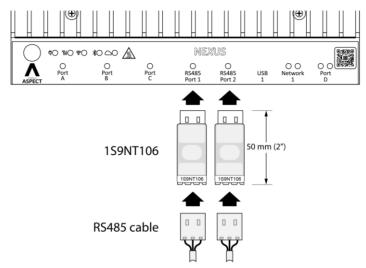
Replacement Europe PSU 1S9NT903

RS485 SURGE PROTECTION

The RS485 voltage surge protector, order code 1S9NT106, is approximately 20 mm (0.8") wide x 50 mm (20") long.

Two of these parts are shipped with each **NEXUS Series** device and for warranty purposes <u>must</u> be installed as described below.

Each RS485 cable must be plugged into a surge protector, and the protector plugged into one of the NEXUS Series device's RS485 ports:



Additional units can be ordered if required, in packs of two.

Customer Impact

From December 2020 all **NEXUS Series** shipments will include 2 surge protectors per **NEXUS** box, and the customer must install them in both RS485 ports before the **NEXUS** is used.

Customers who have previously-installed **NEXUS Series** devices and who experience voltage surges on the RS485 network may purchase the port protectors in packs of 2 from ABB Cylon under the stock code 159NT106.