Model EP8210 - EXOlon PIFA

Description

The LonWorks technology from Echelon is a technology enabling exchange of information between automation products of many different fabricates, provided that they fulfill the LonMark requirements. The EXOlon PIFA from Exomatic is a product that enables the connection of a number of different types of LonMark products to an EPU. EP8210 connects internally to the EFX channel and can, as a result, be installed in both Processor and Expansion houses.

- EP8210 handles a very large number of LonMark-network variables in a Lon net. Up to about 1000 normal complex network variables, SNVTs, can be handled.
- EP8210 has, at present, support for most of the SNVT-types. Support for more types will be introduced as the need arises and new types are released by the LonMark Association.
- EXOapt 2001 is used for configuring the EXOlon PIFA with the SNVT that it will handle in a specific project. After the configuration, EXOapt generates a so-called XIF-file, which makes it possible to, in a standardized way, make variable bindings between Exomatic and LonMark variables in LonMaker for instance.
- In large projects where you want to use the full capacity of the EXOlon PIFA in order to handle many SNVTs, the Neuron's variable binding memory will probably not be sufficient. In order to get around this problem, an Exomatic-developed so-called Plug-in can be used. This, in turn, will require even more from the LonWorks tools.

Specifications

Power Supply.....internal only

Internal Power Consumption

5V ..... TBD

CPU and Memory

CPU1 ..... C515C
RAM ..... 128 kB
Battery backup of RAM ... CR2032 Lithium button cell in carrier, 5 years min, then replace!
PROM .....64 kByte with PIFA OS and Neuron handling
CPU2.....Neuron type 3150
RAM ..... 8 kByte
PROM ..... 64 kByte with MIP software licensed by Echelon

External Communication Port.....78 kbps FTT10A
max cable length .....depending on bus topology and cable type, see www.echelon.com
connection ..... Phönix terminal block
lightning protection .....standardized discharge gap on PCB

Connections

EP8210 is fitted with a so-called transceiver, FTT10A, standardized by Echelon. This means that you can find the answers to your questions regarding communication speed, bus topologies, bus terminations, recommended cable types, communication distance etc. on Echelon's website, http://www.echelon.com/products/technical/manuals.asp. A couple of important facts regarding the connection itself:

- EP8210 has an FTT10A output for two-wire or screened cable.
- EMI-earth ⏚ must be connected to a ground rail or equivalent to divert disturbances.

Figure 96. Connections for EP8210.