TAC Xenta 471-U8

0FL-4146-000

Smoke Control Installation Datasheet

The Xenta 471-U8 I/O module is UL Listed (UL864) for application in a TAC Smoke Control System. This data sheet provides information, instructions and restrictions pertaining to the proper application of this specific product in a smoke control system. This data sheet takes precedence over other general product installation and application information for the Xenta 471 and must be used in conjunction with the "Smoke Control Systems Manual" (0-004-7897-0). The manual provides a system level view of the smoke control application and provides additional information regarding the various products that can be interconnected to form a system.

General Application

The TAC Xenta 471 is an Analog Input module in the TAC Xenta family. It is used as an expansion module for the TAC Xenta controllers, connected by the common network.

The module has eight universal analog inputs. The analog inputs can be used independently for current input or for voltage input. The current input is either supplied internally from the I/O module or from an external source.

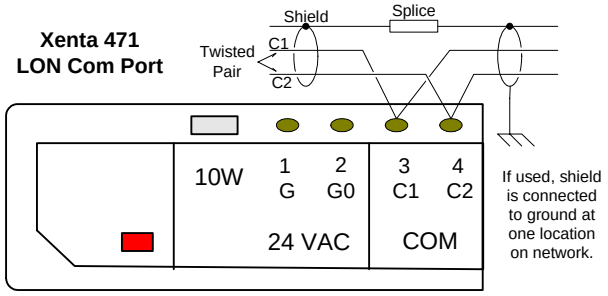
The Xenta 471 is associated and configured to be managed from a a specific controller (301, 302 or 401) with the assistance of the TAC Menta ® graphical engineering tool .

The Xenta 471 I/O module belongs to a family of I/O expansion modules approved for use within the TAC smoke control system.

The Xenta 471 is applied to the control of the full spectrum of HVAC and other facility equipment. The application of this equipment may be part of an automated or manual smoke control response.

Controller Network Communications

The Xenta 471 I/O module communicates with the managing controllers using a common network, LonWorks TP/FT-10, 78Kbps LON (Local Operating Network). The LON communications is power limited and supervised from the FSCS controller. Maximum cable length is 8850ft/2700m (when using bus configuration and specified 16AWG cable) See smoke control system manual for table of cable and distance specifications.



LON Network Integrity

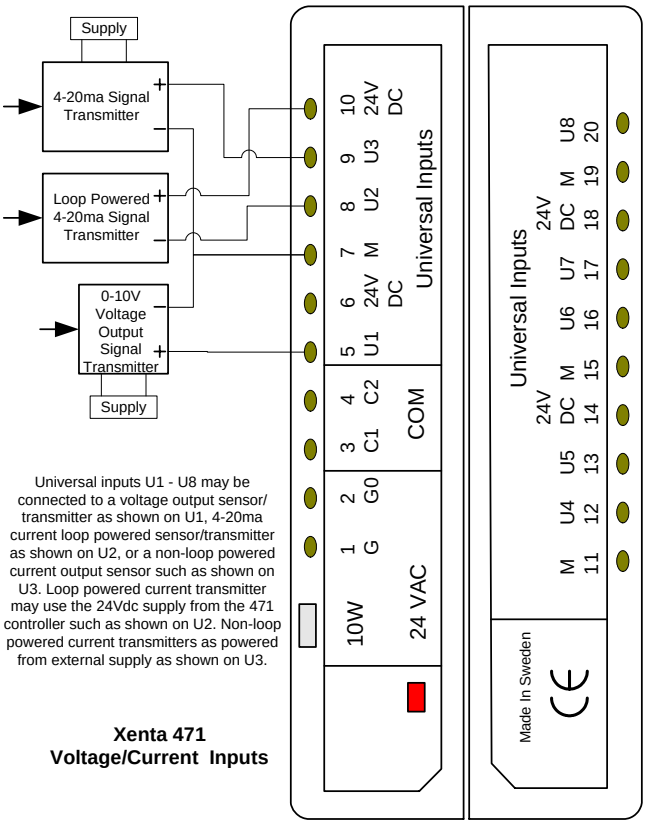
In smoke control applications, the LON network communications cable may only interconnect with products that are UL864 listed. The smoke control system manual identifies the other TAC and 3rd party products that may be interconnected in the smoke control system with the Xenta 471.

Communications integrity to/from the Xenta 471 module must be supervised from the X301/302/401 base controller and this status should be supervised by the FSCS controller. The FSCS should be configured to enunciate any communications faults detected in the connectivity with the controllers used in the smoke control application.

Voltage or Current Input Connections

The Xenta 471 I/O module provides 8 universal inputs that can be configured to monitor voltage (0-1V or 0/2-10V) or current (4-20ma) signals.

Voltage Input Signal:	0/2 - 10Vdc or 0-1Vdc
Voltage Input Impedance:	100K ohm
VI Wire Length (Sensor self powered):	660ft. Max.22awg
Current Input Signal:	0/4-20ma
Current Input Impedance:	20 ohms
Sensor Supply Output:	24VDC +-2V
24V Supply Output Load:	160ma Max.



Universal inputs U1 - U8 may be connected to a voltage output sensor/ transmitter as shown on U1, 4-20ma current loop powered sensor/transmitter as shown on U2, or a non-loop powered current output sensor such as shown on U3. Loop powered current transmitter may use the 24Vdc supply from the 471 controller such as shown on U2. Non-loop powered current transmitters as powered from external supply as shown on U3.

Xenta 471
Voltage/Current Inputs

Enclosure

The Xenta 471 I/O Module is housed within a plastic enclosure and must be plugged into an Xenta 400 mounting base (Part # 074-0902-x) ordered separately. To simplify installation, the mounting base can be pre-mounted using mounting holes in the base, or snapped onto standard TS 35mm DIN rail (EN50022) and should be installed within one of the ENCL-.. series enclosures designated in the smoke control system manual.

Operating Environment

Operating Temperature:	32 to122°F (0 to 50°C)
Storage Temperature:	-4 to122°F (-20 to 50°C)
Humidity:	max. 90% RH non-condensing

Power

The Xenta 471 I/O module is powered with 24VAC from one of the XFMR…. Series transformers designated in the smoke control system manual.

Power Input:	24VAC +-10% 60Hz @ 10VA Max

All inputs and outputs are Class 2.