

GemLan Router

Datasheet

A-GML

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1. PREFACE

1.1. ABOUT THIS DOCUMENT

This document contains the technical data for the GemLan Router. provides intelligent data routing between either EtherNet/IP or AB Ethernet PCCC (e.g. PLC5 Ethernet communications) and the GEMLAN-D's DecNet (Ethernet) network. This allows the user to integrate a GEM80 controller into a Rockwell Logix platform (e.g. ControlLogix or CompactLogix) or Rockwell HMI (e.g. FTView / PanelView) with minimal effort.

1.2. FEATURES

The module can be configured to either exchange data between a Logix controller and a GEM80 controller at a fixed interval, or as an AB Ethernet PCCC slave and DECNet master allowing a Rockwell SCADA to directly communicate with a GEM80 controller.

The GemLan Router is configured using the Aparian Slate application. This program can be downloaded from www.aparian.com free of charge.

The module also provides a range of statistics to help fault find any problem.

A built-in webserver provides detailed diagnostics of system configuration and operation, including the display of GemLan operation and communication statistics, without the need for any additional software.

1.3. ARCHITECTURE

The figure below provides an example of the typical network setup for connecting FTView to a GEM80 controller via the GEMLAN-D card.

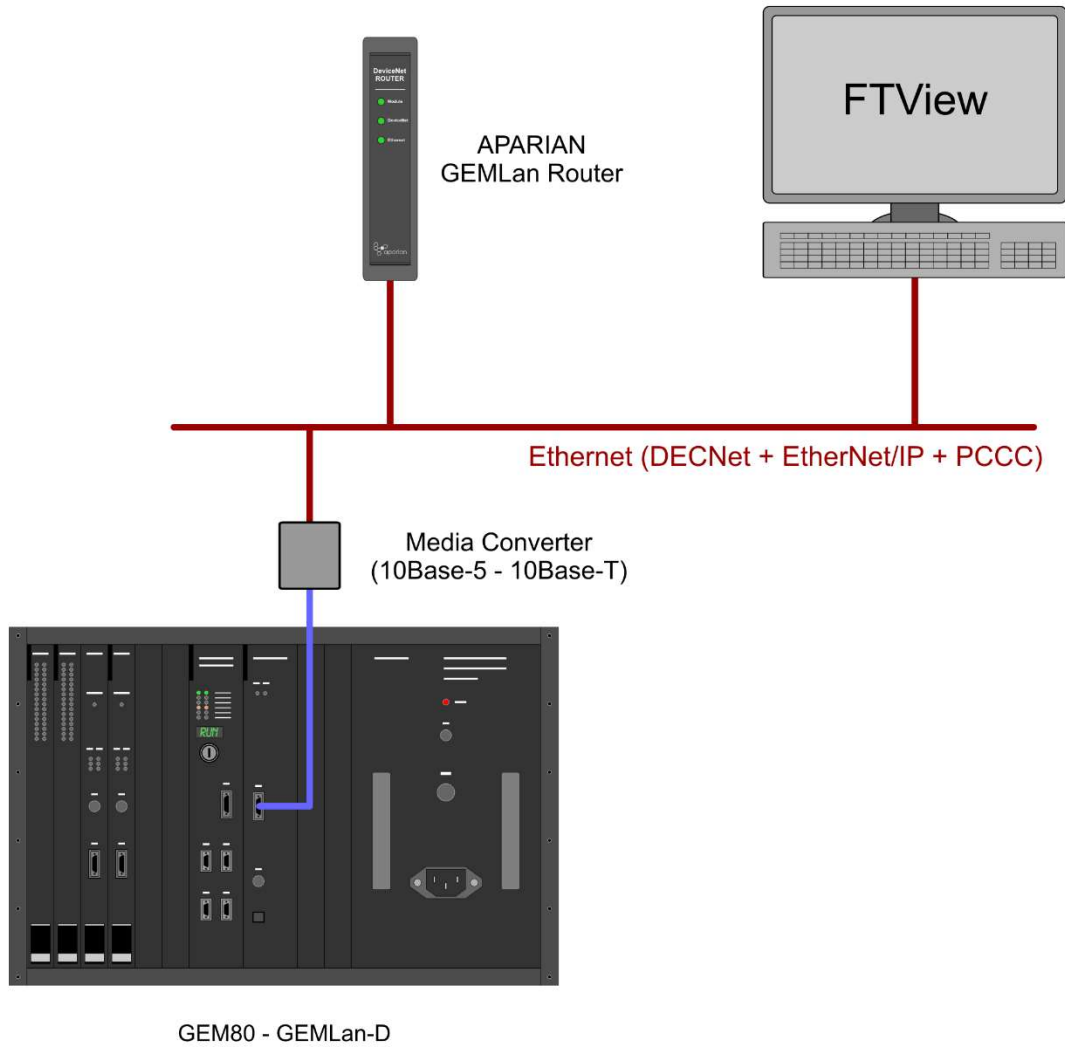


Figure 1.1. – Example of a typical network setup using FTView

The figure below provides an example of the typical network setup for connecting a Logix Controller to a GEM80 controller via the GEMLAN-D card.

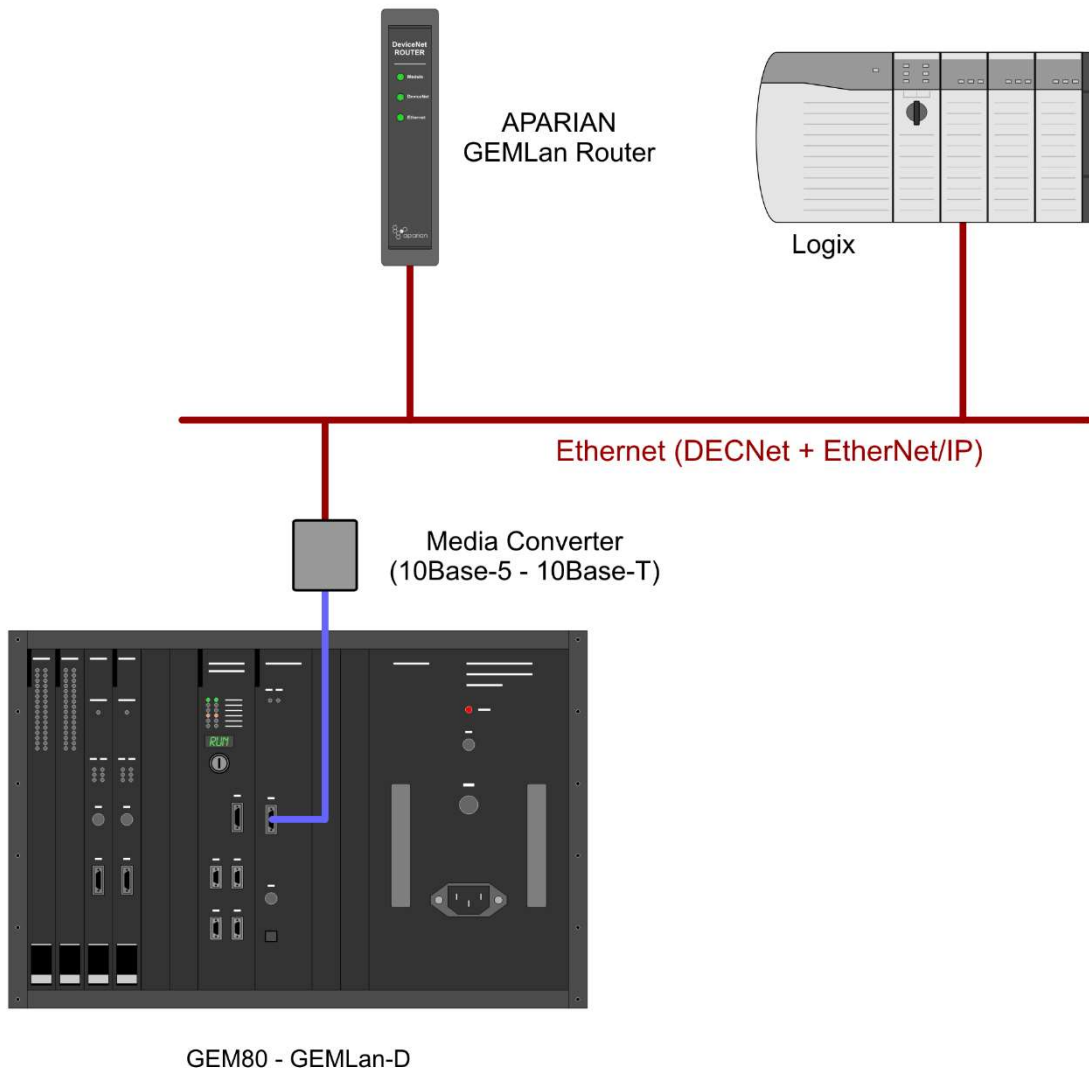


Figure 1.2. – Example of a typical network setup using a Logix Controller

2. ETHERNET/IP NETWORK

Specification	Rating
Connector	RJ45
Conductors	CAT5 STP/UTP
ARP connections	Max 20
TCP connections	Max 20
CIP connections	Max 10
Communication rate	10/100Mbps
Duplex mode	Full / Half
Auto-MDIX support	Yes

Table 1 - Ethernet specification

3. PCCC

Specification	Rating
Max PLC Mapping	40
Max element count per item	500 (1000 bytes)
Max PCCC Client count	10

Table 2 – PCCC specification

4. DECNET

Specification	Rating
Supported GEM Tables	A - Z
Max element count per transaction	500 (1000 bytes)

Table 4 – DECNet specification

5. ELECTRICAL SPECIFICATIONS

Specification	Rating
Power requirements	Input: 10 – 28V DC, (70 mA @ 24 VDC / 130 mA @ 10 VDC)
Power consumption	1.7 W
Connector	3-way terminal
Conductors	24 – 18 AWG
Enclosure rating	IP20, NEMA/UL Open Type
Temperature	-20 – 70 °C
Earth connection	Yes, terminal based

Table 5 - Electrical specification

6. CERTIFICATIONS




Certification	Mark
CE Mark	
RoHS2 Compliant	RoHS2
ODVA Conformance	EtherNet/IP™ * F/W 1.001
RCM	
UL Mark File: E494895	 LISTED CLASS 1, DIV 2, GROUPS A, B, C, D

Table 6 – Certifications

7. DIMENSIONS

Below are the enclosure dimensions as well as the required DIN rail dimensions.

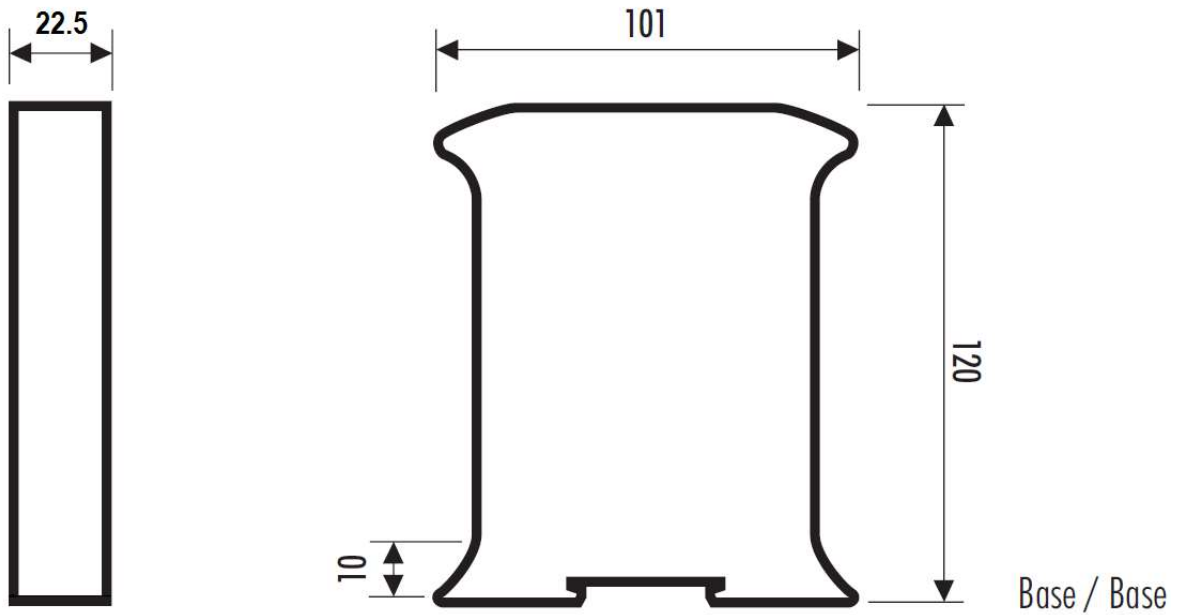


Figure 3 - GemLan Router enclosure dimensions

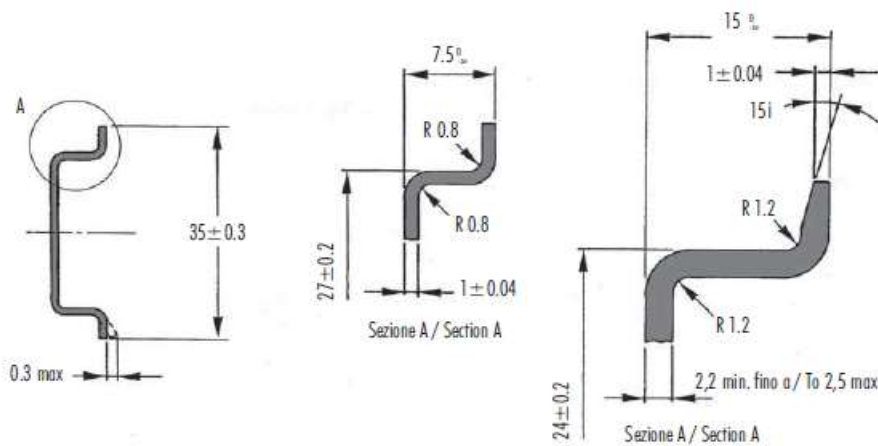


Figure 4 - Required DIN dimensions