Alta dt
data technologies

eNet-A429™

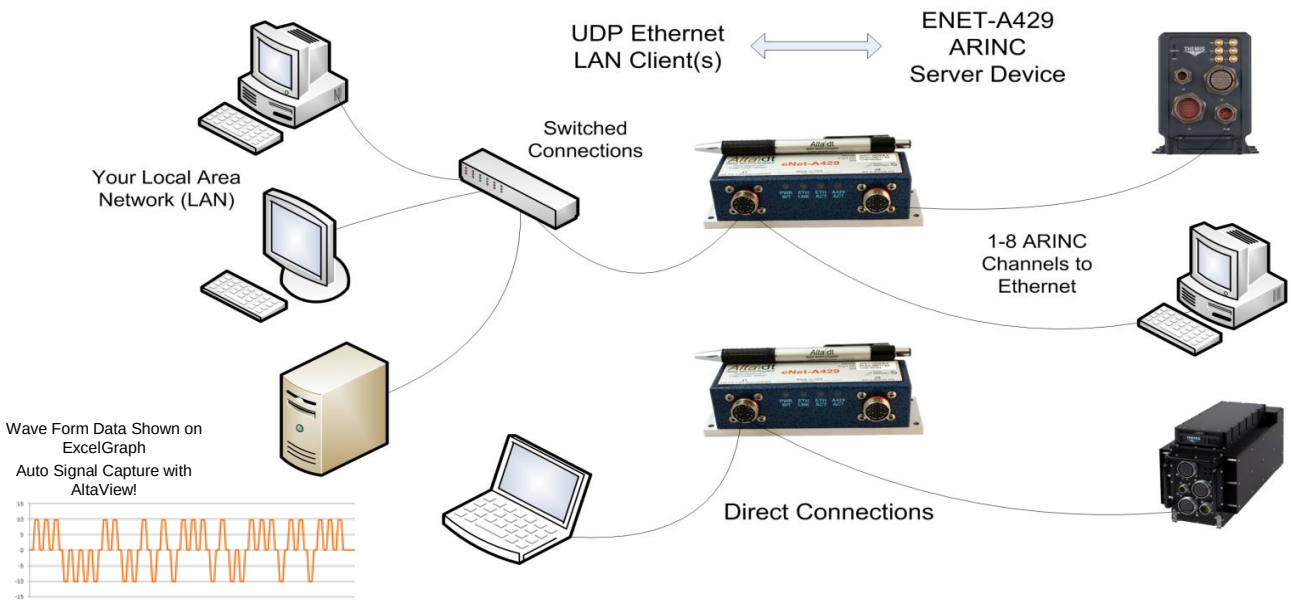
Remote ARINC Operations for Ethernet Networks

Small 13.5 x 3.7 x 4 cm
200 grams

- 10/100/1000 Ethernet <-> 1-8 ARINC Channels
  - 4 Channels RX or TX; 4 RX Only Channels
- Thin-Server, Real-Time UDP Ethernet
- 8-bit, 1 uSec A/D Signal Capture on First Two RX Channels!
- Auto RX Mode for ARINC->Ethernet Bridging
- Auto-Startup with TX/RX Images – Fast Auto-Boot.
- 5-30 VDC, 300-900 mAmp max/300-700 mAmp typical. 200g Weight, POE Optional
- Ideal for Lab, Sims or Rugged Deployed
- IRIG-B RX Decode, PPS, Triggers, Discretes

Alta's ENET-A429 Provides Ethernet to ARINC Connectivity

Ideal for Lab or Rugged Vehicle Applications



eNet-A429™ is an innovative product that provides "remoting" of ARINC operations on 10/100/1000 Ethernet IP/UDP local area networks (LAN). eNet-429 is a small, low-power, rugged device that provides connectivity for 1-8 ARINC 429/575/573/717 Channels - Ideal for remoting ARINC connections for in-field applications or point-point lab usage.

Alta has combined the industry's most advanced 32-bit ARINC FPGA protocol engine, ***AltaCore***™, with a real-time IP/UDP thin server. The customer can implement their application with the same feature-rich application programming interface, ***AltaAPI***™, as used with standard cards – often without even recompiling - the utlimate in code portability.

****NOTE: eNet-A429 (server) is a real-time Ethernet/ARINC device, but your computers' (client) IP stack may not be!** The eNet-ARINC device provides real-time UDP receive and transmit requests to ARINC buffers, but the client's IP/UDP stack will induce path delays as compared to backplane cards. For many applications (<100-1000 packets per second), this product will provide unparalleled flexibility in ARINC configurations (much better than USB devices). Contact Alta for test results on various OS and computer configurations – your system results may vary.

www.altadt.com

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(In US): 888-429-1553 (Outside US): 505-994-3111 Fax: 805-504-8588

AltaCore-A429
eNet-A429™ Specifications

General

- 4 RX/TX Selectable Channels; 4 RX Only
- 13.5 x 3.7 x 4cm, 200g without cabling Rugged, Mountable
- 8-bit, 1 uSec A/D Signal Capture on First Two RX Channels!
- Support ARINC-429/575/573/717
- Standard 10/100/1000 Ethernet UDP
- 5-30 VDC Input Accepted (USB 1Amp)
  Power 1000E @ 40% Load: 500 mAmps
  Power 100E @ 50% Load: 400 mAmps
  POE Optional (+55C Ambient Max Temp)
  - Glenair Mighty Mouse Connectors. 801-011-02M10-26PA/B Mates.
  - Encode or Decode Almost any ARINC-429 Physical Layer Signal (512-200K Baud)
- 8-bit, 1 uSec A/D Signal Capture on First Two RX Channels!!
- One Megabyte RAM for Buffering
- Flash Disable Factory Setting for Secure Mem
- Parts Temp (C) : -55 to +120 Storage, 0 to +70 Commercial, -40 to + 85 Extended Temp
- 2 Avionics, 2 RS-485, One TTL In and Out
- Power-Up, Loop-Back and User BIT
- IRIG-B RX PAM and RX/TX PPS Time Sync
- IPC Level 3 and ISO 9001:2008 Processes

TX Features

- Simple or Detailed Frequency (Hz) Control Per Label/Word List
- ARINC-717 Frame Support
- Interrupts, External Trigger
- Full Error Injection

RX Features – Three Buffering Modes

- Channel Level Label/Word Tables
- Channel Level Current Value Tables
- Multi Channel Data Tables for All Channels
- ARINC 717 Frame Support
- 64-Bit, 20 nsec Time Tags, Interrupts, Trigger
- Full Error Detection

Playback/Signal Generator (TX)

- Real Hardware Playback from Archive Files
- H/W Playback Timing to 10 usec
- Signal Vector Generation at 1 uSec **INDUSTRY FIRST**. Construct Bit Encoding. Ideal for Validation

Software: *AltaAPI & AltaView*

- Multi-Layer ***AltaAPI*** Architecture to Support Windows and C Linux, VxWorks, LabVIEW, etc..
  - Contact Factory For RTOS Platforms
- Optional ***AltaView*** is Based on the Latest Windows MS Office 2007 User Interface Style with Ribbon-Bar
  - Full Analyzer Integration Tool
  - Multi Language Support
  - "-A" Option at end of Part Number

Part Numbers

- **ENET-A429-4**
  - 4 Shared RX/TX
  - 2 RX/2TX ARINC-717 Shared Channels
    - (Each 717 Tx or RX Replaces Two 429 Channels – J1 Connector)
- **ENET-A429-8**
  - 4 Shared RX/TX; 4 RX ARINC-429 Channels
  - 2 RX/2TX ARINC-717 Shared Channels
    - (Each 717 Tx or RX Replaces Two 429 Channels – J1 Connector)

Options: Add -E for Ext Temp Parts (-40 to +85C) and -P for POE. Add –A for AltaView Analyzer. Example: ENET-A429-8-AE.

NOTE: On shared channels: TX lines have an extra RX load; when powered-off, RX channels can have severe voltage drain – use only dedicated RX channels for critical systems.

Optional Cables:

- **ENETCAB-J1-01**
  - 4 ARINC RX/TX, Ethernet & USB Power
- **ENETCAB-J2-01**
  - 4 ARINC RX and Auxiliary Mini DB-26

5 Year Limited Warranty

EU and China RoHS Compliant

Contact Alta for Special Lead Build Configurations

Non-Public Telcom/CE Device

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