



# AVA

## Analog Voice Adapter



**AVA**

## FEATURES

- Analog voice over serial synchronous or asynchronous
- Voice over Ethernet version – Model AVA-E
- Serial Network port can be sync or async
- RS232 serial network or Ethernet network
- Point-to-point with serial network
- Host to many or “Hoot & Holler” with AVA-E
- User serial port plus voice
- Simple, low cost analog phone device
- FXS/FXO, 4-wire E&M or Push-to-Talk interface
- Very high quality low bit rate voice, P25 rates of 2250 bps to 9600 bps
- 32K ADPCM (G.721) or 64K PCM (G.711) voice options
- Industrial temperature -40° to +85° C for the AVA model, -20° to +85° C for the AVA-E
- DC power options: 12, 24, 48 VDC
- Serial or browser setup
- USB serial port or RS232 port for configuration
- Web browser configuration for the AVA-E
- Easy to configure and maintain

## DESCRIPTION

AVA is a one voice port, one serial port device available with FXS, FXO, 4-wire E&M and a push-to-talk interface for a speaker-microphone. AVA is designed for simplicity and ease of setup. The unit can be setup using a serial terminal interface.

AVA provides exceptional compressed voice quality at speeds ranging from 2250 to 9600 bps. The compressed voice is based on the same chip set used for Project 25 (P25) radio interoperability. This is a voice chip set with a long market life, which translates to a long market life for AVA. AVA also supports 32K ADPCM (G.721) and 64K PCM (G.711).

AVA can be used point-to-point, one to many – up to 5- with AVA-E, or “Hoot & Holler”. “Hoot & Holler” uses the DCB Packet Repeater for voice distribution.

AVA includes FXS, FXO, 4-wire E&M, and push-to-talk with speaker output (PTT) audio interfaces. PTT is included with the FXS/FXO/E&M units. The PTT audio interface uses an optional microphone and powered speaker for PTT applications, and as an add-on item for FXS/FXO/E&M units. The speaker circuit has a .25 watt amplifier.

AVA can operate over serial or over Ethernet networks. The model AVA-E has a built in Ethernet network interface. For multiple voice ports, AVA can be combined with SR multiplexers or the 4-port EtherPath.

AVA has several field selectable choices for the network port:

1. Asynchronous RS232 network with a user async RS232 port.
2. Synchronous RS232 network with a user async RS232 port.
3. The AVA-E has the built in Ethernet.

AVA features an asynchronous user port for async data, including SCADA polling. The async data port can also be used to concatenate AVAs for more voice ports over networks of 9600 bps and faster. AVA resolves the contention between the polling and the voice.

Additional asynchronous serial ports may be multiplexed using the DCB multiplexers.

### Applications for AVA

- Utility substations
- Office to home analog extensions
- Gas and oil production, pipelines
- Sales personnel at home or traveling
- Phone extensions over wireless links

## SPECIFICATIONS

### General

- One asynchronous RS-232 user port, speeds to 230.4 Kbps
- One synchronous or asynchronous network port, up to 256 Kbps
- Model AVA-E has a the built in Ethernet network port
- One to many with AVA-E (up to 5), more with the DCB Packet Repeater
- Network port is serial (AVA) or Ethernet (AVA-E)
- FXS, FXO, E&M and PTT microphone plus speaker voice interfaces
- P25 compressed voice 2250 to 9600 bps, 32K ADPCM (G.721) or 64K PCM (G.711)
- USB serial port for setup and firmware upgrade
- Test tools to measure delay, monitor data port traffic

### Protocol Features

- Point-to-point, one to many, or "Hoot & Holler"
- Serial RS232 or USB PC/terminal configuration/management
- Voice jitter buffer

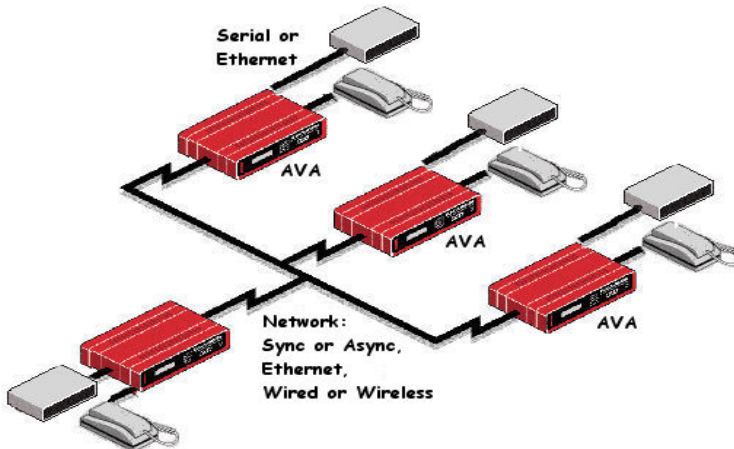
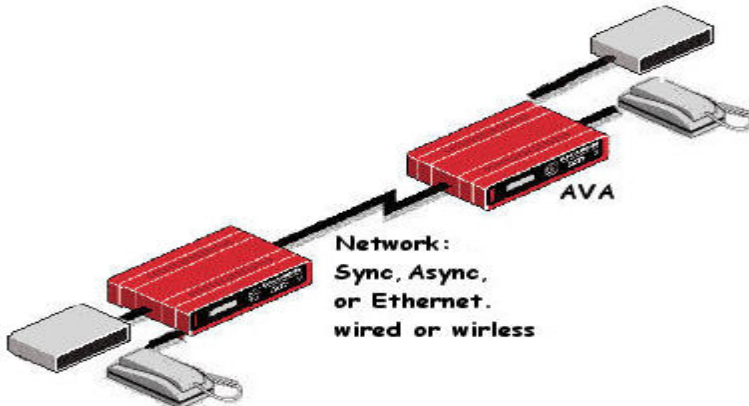
### Indicators (front panel)

- Power and data activity

### Controls

- Switches: Reset

## APPLICATION



### Physical/Electrical

Power requirements: 6VDC, 600 ma  
12, 24, 48, 125 VDC and 240 VAC options  
Supplied with 100-240 VAC external supply  
7.25" x 5.5" x 1.75"

One pound

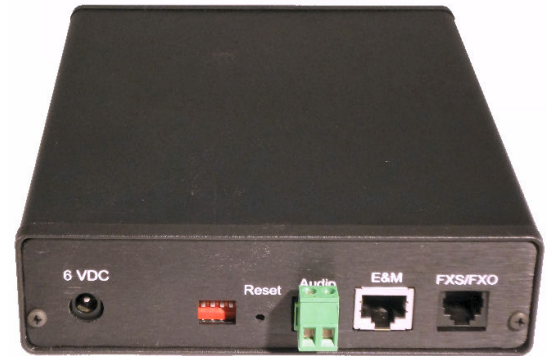


### Environmental

- Operating Temp: -40° to +85° C
- Storage Temperature: -50° to +95° C
- Humidity: <95% Non-condensing

### Ordering:

FXS/FXO/E&M/PTT interface are standard.  
Single interface units only (FXS, or FXO or  
E&M or PTT) by volume special order.  
6VDC, 100-240 VAC power supply is standard.  
Specify 12, 24 or 48 volt DC power supply if  
needed.



Rear View of AVA



**Data Comm for Business, Inc.**

**2949 CR 1000 E**

**Dewey, IL 61840**

**Voice 8004DCBNET**

**(800.432.2638)**

**Fax 217.897.8023**

**Email [www.dcbnet.com/contact.html](http://www.dcbnet.com/contact.html)**

**Web <http://www.dcbnet.com>**

