



Intraplex® VF-28 & VF-29 Voice Modules

4-Wire Transmission Only Voice Modules



Intraplex 4-wire transmission-only voice frequency modules are available with PCM coding (64 kbps per channel) or ADPCM coding (32 kbps per channel).

Coding	4W TO modules for T1 systems	4W TO modules for E1 Systems
PCM	VF-28	VF-28E
ADPCM	VF-29	VF-29E

These modules plug into Intraplex access products, allowing voice channels to be combined with other types of payload channels for transport over T1 (1.5 Mbps), E1 (2 Mbps), or other high-speed digital lines.

Key Features

- Four independent voice channels per module
- One, two, three, or four-channel operation
- Input and output level attenuation
- Support for fax or modem transmission at up to 9600 bps (VF-28) or 2400 bps (VF-29)
- Local and remote loopbacks

Specifications

Specifications and designs are subject to change without notice

General	
Modules	<ul style="list-style-type: none">VF-28/28E: Four-channel PCMVF-29/29E: Four-channel ADPCM
System Compatibility	<ul style="list-style-type: none">The VF-28 and VF-29 are compatible with Intraplex T1, ISDN, and variable-rate access products.The VF-28E and VF-29E are compatible with Intraplex E1 access products.
Configuration	Four independent voice channels per card
Voice Frequency	
Frequency Response	300 to 3000 Hz, ± 0.2 dB
Input/Output Level (Nominal)	0 dBm in, 0 dBm out, ± 0.1 dBm
Input Level Range	-16.0 dBm to +3.0 dBm, adjustable via the multiplexer's remote access port
Output Level Range	-10.0 dBm to +10.0 dBm, adjustable via the multiplexer's remote access port
Impedance	600 Ω input and output
Idle Channel Noise	Less than 23 dBrcO
Signal to Distortion	1004 Hz input, 0 to 30 dBm: less than 33 dB in C message weighting
Network Interface	
Coding and Data Rate	<ul style="list-style-type: none">VF-28: μ-law PCM, 64 kbps per channelVF-28E: A-law PCM, 64 kbps per channelVF-29: μ-law ADPCM, 32 kbps per channelVF-29E: A-law ADPCM, 32 kbps per channel
Time Slot (DS0) Assignment	<ul style="list-style-type: none">VF-28/28E: One to four sequential time slots (one per active channel); starting time slot selectableVF-29/29E: One or two sequential time slots (one for each two active channels); starting time slot selectable
Status and Diagnostics	
LED Indicators	Green LED for Service On
Loopbacks	Local and remote analog loopbacks, activated via the multiplexer's remote access port
Input/Output Modules	
Connector	50-pin telco-type female connector on MA-301 Module Adapter; one MA-301 supports up to three modules in adjacent physical slots (12 voice channels)
Physical and Environmental	
Nominal Power Consumption	2.0 watts per module
Temperature	0 $^{\circ}$ C - 50 $^{\circ}$ C operating
Humidity	0% - 90% noncondensing