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# NEC VG3 Telephony Media Gateways

NEC VG3 telephony media gateways from NEC are easy-to-deploy network appliances. The VG3 COHub, BranchHub and PhoneHub provide PSTN connectivity and legacy PBX interconnection as well as IP-enabling analog stations for seamless migration to VoIP. The VG3 MeetingHub delivers powerful on-demand conferencing for up to 60 callers. VG3 telephony media gateways offer flexible cost-effective solutions for every environment.

## COHub Digital Trunk Connectivity

- Connects NEC Sphericall IP PBX to the PSTN for outside calling via T1/E1 PRI, T1 CAS, E1/R2
- Connects NEC Sphericall IP PBX to an existing PBX via T1 Q.SIG to integrate branch offices or consolidate multiple PBXs
- Auto-discovery and configuration for easy deployment

## PhoneHub Analog Station Connectivity

- VoIP-enables analog stations including phones, fax machines, and more
- Integrates analog phones with NEC Sphericall Desktop software
- Offered in 12 and 24 port configurations
- Power-loss transfer connects emergency phone to the PSTN
- Auto-discovery and configuration for easy deployment

## BranchHub Analog Station & Trunk Connectivity

- Connects NEC Sphericall IP PBX to the PSTN for outside calling via 6 analog trunks
- VoIP-enables up to 12 analog stations
- Integrates analog phones with NEC Sphericall Desktop software
- Power-loss transfer connects phones to the PSTN
- Auto-discovery and configuration for easy deployment

## MeetingHub 60 Port Conferencing Bridge

- In-house conference bridge enables up to 60 simultaneous participants across multiple conference lines
- Eliminates need for expensive outside conferencing services
- Each conference bridge can be configured with multiple DID's or extensions, or deployed as private conference lines
- NEC Sphericall Desktop software displays the Caller ID of conference participants
- Auto-discovery and configuration for easy deployment

## NEC VG3 Voice Media Gateways Product Specifications

### Digital Trunk Specifications

- Signaling protocols: T1/E1 ISDN, T1/E1 Q.SIG, T1 CAS, E1/R2
- Complies with AT&T TR62411 for clock and data recovery, jitter tolerance and other electrical standards
- Long Haul DS1 and Short Haul DSX1 digital network interfaces
- RJ48C jack for T1/E1 and two BNC jacks for E1 access
- Dual Bantam jack for T1/E1 monitoring
- Full touch-tone DTMF support

### Analog Trunk Specifications

- 6 loop start FXO ports
- Ring detection: 20 Hz @ 40-130VAC
- Caller ID detection per Telcordia GR-30-CORE
- 6 failover ports to FXS stations
- Software programmable for country-specific tone and timing requirements

### Gateway Network Specifications

- Auto-discovery to Sphericall IP PBX
- Auto-sensing 10/100 Ethernet interface via RJ45
- G.711, G.729 codec support

## NEC VG3 Telephony Media Gateways

- Codec auto-negotiation
- A-law or  $\mu$ -law companding
- Echo cancellation per G.168
- QoS: 802.1 p/q for Ethernet, DiffServ for IP
- DHCP or static IP addressing
- RTCP media, control, statistics and reporting
- FTP/TFTP for firmware updates
- Telnet
- SNMP

### MeetingHub Specifications

- Up to 60 individual conference ports per Hub
- Multiple virtual conference bridge lines per Hub
- Conference call participants displayed and managed via Spherical Desktop
- Automatic VoIP codec transcoding

### Analog Station Specifications

- 12 or 24 FXS station ports
- 1 PSTN emergency fallover port (PhoneHub)
- 6 PSTN emergency fallover ports (BranchHub)
- 50-position telco connector, wired per RJ21X
- 25mA DC loop current (polarity insensitive, off-hook battery = -24VDC)
- 2 wire impedance, 600ohm nominal
- Ring generation: 20Hz, 2 secs on/4 secs off (default)
- 45Vrms, trapezoidal wave shape, 2.0A REN max
- Frequency response: 300 to 3400 Hz +/- 3dB (tx/rx)
- Max loop length: 2000 ft. (609m), 24 AWG on-premises wiring
- 2500 analog phone set support
- CLASS phones and features including: Caller ID, Call Waiting with Caller ID, FSK Message Waiting, Park, Pickup, Do Not Disturb, Forwarding
- Paging system interface
- Music-on-hold source interfaces
- Modem and fax support
- Country specific and customizable tones and timings

### Gateway Physical Characteristics and Approvals\*

- 17" x 1" x 15 in. (44 x 4.45 x 38.1 cm)
- 1U 19 inch (48cm) rack mounted or standalone
- Unit weight: 10.8 lbs (4.0kg)
- Operating temperature: 32° to 104°F (0° to 40°C)
- Operating humidity: 0% to 90% RHNC
- Operating power: 110/240V auto-sensing
- Telecom approval: FCC Part 68, CE
- EMC approval: FCC Part 15, Class A, CE
- Safety approval: cTUVus, CE

\*BranchHub approvals pending

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