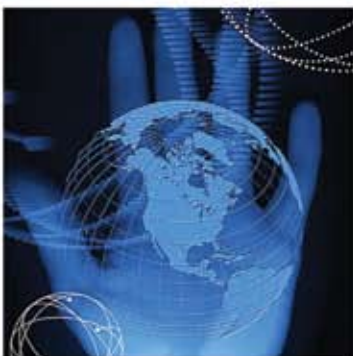




**MICROTEL  
TECHNOLOGY**

# Microlog Call Recording & Monitoring System

Simple solutions for your communication needs



# Microlog Call Recording & Monitoring System

## Microtel Technology

Founded in 2000, Microtel Technology specialises in communication products and solutions for the Contact Centre and office market. In Microtel Technology we believe in providing a simple, innovative and cost effective solutions for your communication needs.

## Microlog Pro for Offices and Contact Centres

As more companies are recognizing the benefits and importance of recording calls, Microlog Pro is developed to provide a powerful call recording ,monitoring and quality management solution to enhance and increase efficiencies for offices and contact centres. Microlog Pro offers reliable full time call recording, live monitoring, remote playback and searching, screen capture and quality assessment tools to contact centres managers and supervisors for overall improvement of contact centre operations and productivity.

## Contact Center

Microlog Pro Call Recording System is a scalable quality monitoring solution complimenting any size of contact center at an affordable price to suit any budget. Flexible recording strategies including total recording, selective recording and recording on demand enable you to capture customers' contacts in most reliable ways. Microlog Pro is designed to accommodate the most complicated infrastructure. You can easily record and monitor not only call interaction but IP telephony and agent's screen activities, which ensure you have a 360° view for your contact center performance. Supporting a wide - range of computer telephony integration (CTI) types enables you to assign specific attributes or "tags" to contacts for quick and easy identification, such as account names and numbers over recording and call indexing. Furthermore, you can integrate the recording system into your own business system seamlessly avoiding the complexity and time-consuming process. Microlog Pro provides you the more effective and efficient solution.

## Financial Institutions

For both law enforcement and service level evaluation purpose, you need a sophisticated and robust recording, retrieval and storage solutions. Microlog Pro Call Recording System provides you reliable recording and monitoring technologies enabling you to record thousands of call without missing. Multiple level passwords mechanism and anti-virus plans protect your archiving from any unauthorized access. The centralized storage strategy provides you a more effective and easier way to access and manage the archives.

## How companies use Microlog Voice Logging System

- Resolve disputes & protect yourself from lawsuits.
- Reduce data entry errors and customer misunderstandings.
- Coach & motivate employees using sample recordings.
- Learn which sales offers & techniques work best.



## Microlog Pro - Efficient and Easy to Use Voice Recording Solution for Contact Centres

- Supports uni-platform i.e analog incoming lines, digital ISDN Trunk, digital extensions, analog extensions and VOIP call recording.
- Flexible approaches to call recording requirements including Total Recording, Selective Recording and Recording On Demand.
- Random monitoring and capturing agent's screen activity while recording.
- Search for calls by date, time, duration, channel, agent, DTMF and more.
- Selectable storage media including tape, DVD +/- R(RW), NAS, SAN.
- Microlog Web enables access to call record and live monitor telephone conversation anytime anywhere.
- Graphic reports with performance details summary enables supervisors/managers to view Key Performance Indicators.
- Quality management tools for appraisal and scoring of agents performance.
- Reliable and secure password mechanism to protect unauthorized access.
- Centralized storage provides a more efficient and cost effective way to manage archives.



# Microlog Call Recording & Monitoring System

## Microlog Pro Analog Recording Solution

The Microlog Pro Analog Recording Solution, member of the Microlog Call Recording System product line, is ideally suited for discreet analog call recording. The high impedance line interface makes it a complete hardware solution for any voice logging application. The Microlog Pro Analog Recording Solution passively taps an analog loop start or ground start 2-wire trunk in parallel, providing audio data while never interrupting service. The Microlog Pro Analog Recording Solution contains all the necessary features to build high-density intelligent Call Logging systems while eliminating the need for costly external conversion hardware, which could be used for recording on demand or data mining for call centres and contact centers.

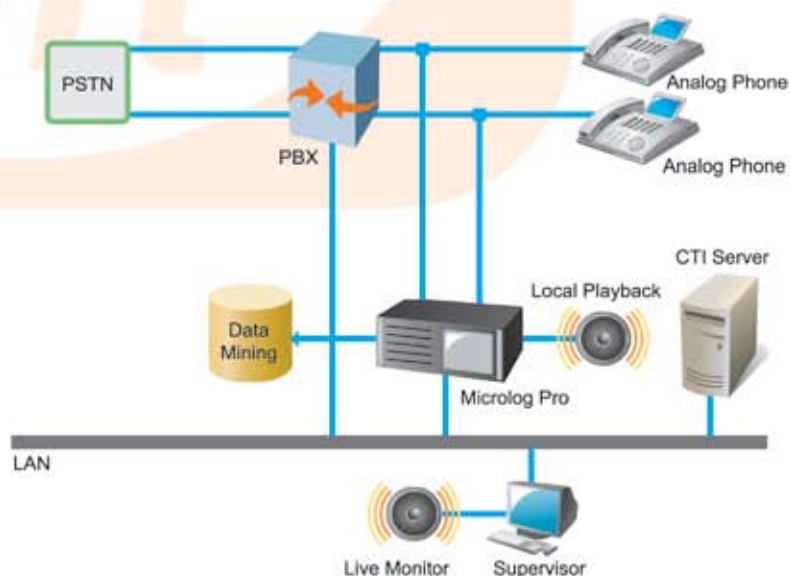


## Features :

- 8–256 channels per system, can be accommodated with different scale of systems.
- Advanced voltage regulation technology, adapted to various kinds of PBX circuit extensively.
- One-site industrial standard solution, easy to install and save storing room.
- Support Total Recording and Recording on Demand.
- Support playback via network and local playback.
- Selectable ways to start recording, such as voltage, vox, network, on/off hook, DTMF.
- Streaming live monitoring via network without any further burden on call logging host.
- Automatic Gain and Volume Control (AGC/AVC).
- Selectable archive storage media, such as: DVD+/-R(RW), tape (DAT), NAS.
- Redundant array of independent disk (RAID) (Option).

## Product Specifications :

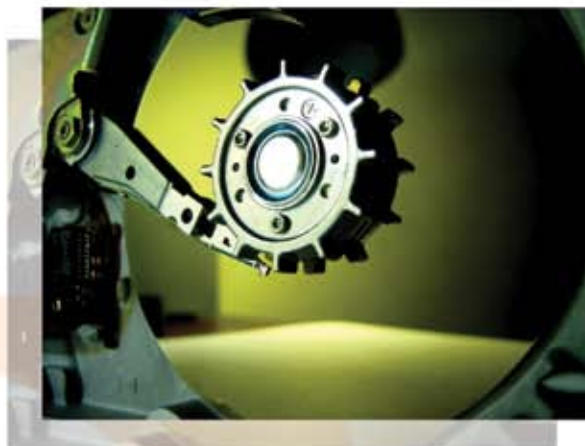
- Min. channels per system: 4
- Max. channels per system: 256
- Extension unit: 4/8/16/24
- Trunk type: Loop Start / Ground Start
- AC impedance: Software selectable with minimum 18 K Ohms Impedance
- Voltage Detection ;
  - two software programmable threshold range: -61V~ 61V
  - accuracy: +/- 2V
  - min Operating Voltage 4.5Vdc
- Silence Detection: programmable from API
- Activity Detection: programmable from API
- Idle channel noise: less than 20dBmc.



# Microlog Call Recording & Monitoring System

## Microlog Pro Digital Recording Solution

The Microlog Pro Digital Recording Solution, member of the Microlog Call Recording System product line, is ideally suited for digital call recording. Microlog Pro Digital can record all kind of digital phone sets and digital PBX without any traditional DAC D/A conversion devices. By using CTI, the Microlog Pro Digital can capture extra information via D-channel which could be used for recording on demand or data mining for contact centers. Microlog Pro Digital supports a wide-range of digital PBX and phone sets and can be upgraded to 256 recording channels per server. In one Microlog Pro Server you can install more than one kind of Voice Recording boards (BRI / PRI).

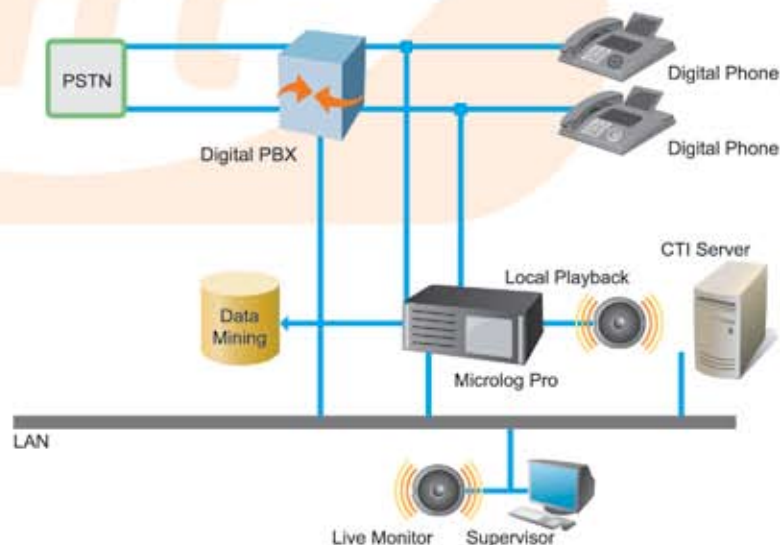


## Features :

- Carrying out tap recording in digital PBX side without any traditional Digital Analogue Converter(DAC) conversion devices
- Support most of mainstream digital PBX and digital phone sets
- Can be upgraded up to 256 channels recording capability per server smoothly
- Selective Recording based on DNIS, ANI, agent ID
- Total Recording and Recording on Demand
- Streaming live monitoring via network without burden on call logging host (Option)
- Recording activated by D-channel information
- Capturing call information such as DNIS, ANI, Call direction, DTMF etc. from D-channel
- Support playback via network and local playback
- Selectable archive storage media, such as: tape (DAT), DVD+/-R(RW), NAS
- Redundant array of independent disk (RAID) (Option).

## Product Specifications :

- Min. channels per system: 8
- Max. channels per system: 256
- Extension unit: 8
- Trunk type: digital PBX station side
- D-channel events: PBX events and phone set events
- AC impedance: software adjustable 1K $\Omega$ /100 $\Omega$
- Supported digital PBX and digital phone sets: Please refer to Microlog Digital PBX Support List



# Microlog Call Recording & Monitoring System

## Microlog Pro IP Recording Solution

The Microlog Pro IP recording solution, member of the Microlog Call Recording System product line, are designed to record calls of VoIP environments.

## How to record VoIP calls on your network

Voice over internet protocol (VoIP) is audio delivered in information packets on a regular computer network or over the internet. VoIP call recording works differently than recording trunk or extension lines or handsets. VoIP call recording taps into your network lines at a hub, or at the SPAN port on a switch. In this way as network traffic travels over your ethernet cables, Microlog Pro IP can detect compatible VoIP packets and record them.

## Microlog Pro IP

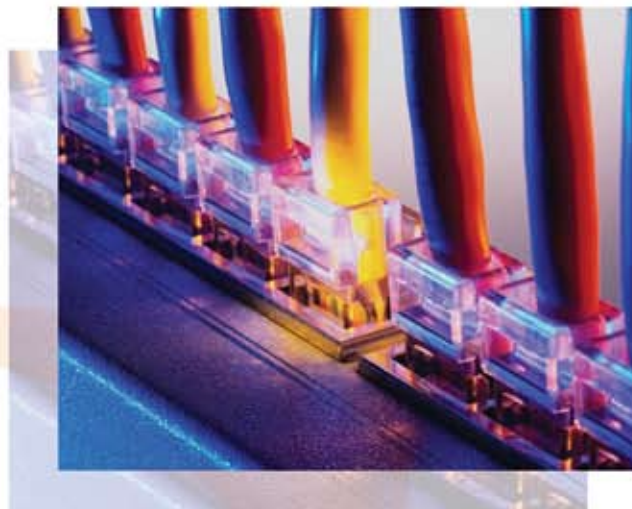
Microlog Pro IP Call Recording Solution, a fully featured software based VOIP recording for IP PBX's passively monitors the LAN for IP calls. Using packet sniffing technology, Microlog Pro software records and monitors calls without interfering with the IP PBX. This is achieved by monitoring VoIP packets using port mirroring on the data switch connected to the IP PBX. When the system detects a call that needs to be recorded, the logger receives and mixes the voice stream of each extension that was included in the call, and accomplishes two directions voice summation locally. (Based on a pre-defined list of IP addresses or extensions) Each VoIP packet that goes to and from the PBX is mirrored to the Microlog Pro IP server. The packets are then reassembled into a recorded call; the file is then compressed and stored for future retrieval. The software platform gives administrators the ability to select which agents IP recording licenses are assigned to.

## Product Specifications :

### Voice format:

G.729a	8Kb/s
GSM 6.10, Microsoft GSM	12Kb/s
	(Not applicable for Active Mode)
G.723(Not recommended)	5Kb/s
G.728	16Kb/s

- DTMF detection: Microlog Pro IP Passive (yes)  
Microlog Pro IP Active (no)
- Vox detection: Microlog Pro IP Passive (yes)  
Microlog Pro IP Active (no)
- Silence detection: Microlog Pro IP Passive (yes)  
Microlog Pro IP Active (no)



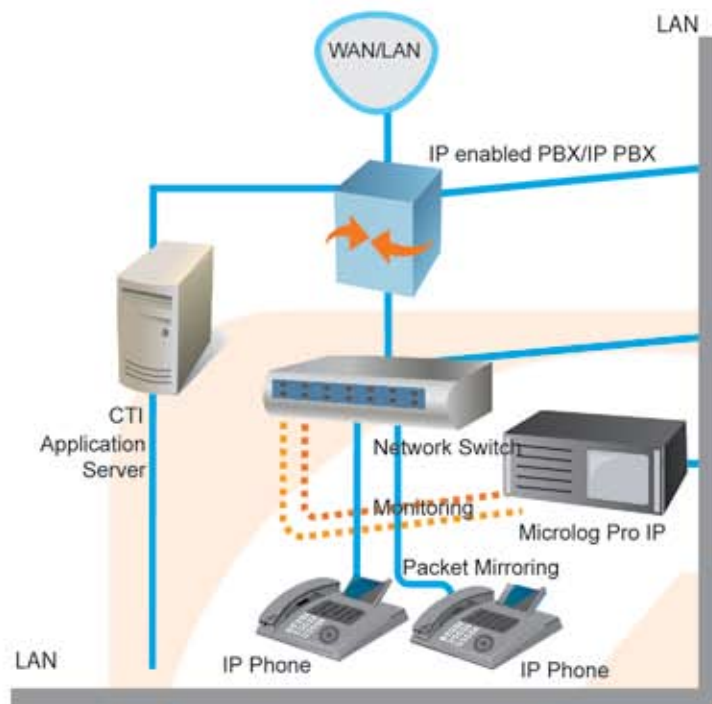
## About software based IP voice recording system

In order to meet the voice recording demands for Enterprise companies and Contact Centres with VoIP telephony environments, Microtel provides purely software based VoIP call recording systems. Without any further proprietary hardware investment. It can be installed on a standard Server, running with Microsoft Windows NT 4.0, 2000, 2003 Server or XP.

## Features :

- Hardware/Software based decoding and capturing packets to make sure that your single system can widely meet the demands for 2~60 channels VoIP recording.
- Never interrupt the conversation by passive tap recording to capture the LAN for VoIP calls.
- Users of Microlog Pro Digital/Analog Recording solution only need to upgrade the licenses to Microlog Pro IP.
- Uni-platform design, you can mix all types of input channels in single one chassis, such as: analog, digital station-side, digital trunk-side, VoIP etc.
- One-site industrial standard solution, easy to install and save storing room.
- Streaming real-time monitoring via network and support the G.729a CODECS for compression of voice files, assure the recording quality and consistency.
- Selectable storage media, such as: tape (DAT), DVD+/-R(RW), NAS (network access storage), SAN (storage area network).
- Capture CTI data via CTI Server (in case of Active mode).

# Microlog Call Recording & Monitoring System



## Screen Recording & Monitoring

Microlog screen capture application - Microlog Screen Recording & Monitoring allows you to capture all activity on your agent's desktop. It provides the supervisor real-time visual status of each agent. You can define any agent you want to monitor and capture the screen activity. Once the call recording for the agent starts, the application will be triggered simultaneously. Microlog Screen Recording do not transmit data of agent's screen but it detect changes and transmits the data using advanced protocol and data compression. Microlog Screen Recording is used for training and appraisal of agent performance. Reviewing actual multimedia interaction is a great way to identify the mistakes made by agents. By illustrating the problem visually, you create new solutions immediately resulting in greater productivity. With the synchronized audio and screen recording, call center manager is able to gain not only a wealth of information about your customers, but also valuable data regarding your call center service level. It is no doubt a useful tool that empowers you to raise customer loyalty.

## Hardware System Requirement

- PC of supervisor and agent: Pentium IV or equivalent 2.8GHz or above.
- Resolution of agent pc's monitor should be configured as 640\*480, 800\*600, 1024\*768.
- VGA memory: not less than 16M, and 32M or above is recommended.

## Product Specifications:

- Type differences:
  - Microlog Pro IP : Passive VoIP recording
  - Microlog Pro IP : Active (Conference) VoIP recording
- Min. channels per system: 2
- Max. channels per system: 60
- Ways to activate/terminate recording: on/off hook, TCP/IP.

## Features :

- Screen capturing, monitoring and playback can be executed by any client workstation in LAN.
- Starting and playback screen and audio recording are synchronized.
- Capturing screen activity only when it changes. Reduce network traffic rate.
- Agents do not see a flash or flicker on their screen, nor do they experience any performance degradation when a supervisor is monitoring.
- Using screen capture in conjunction with voice recording provides a complete picture for accurate evaluation

## Microlog Agent Quality Management

Microlog Agent Quality Management together with Microlog Pro Call Recording can provide you with a diverse range of reporting options. It allows you to generate reports and statistics to measure overall customer experience in a contact centre environment.

Microlog Agent Quality Management is a powerful quality management solution that equips organization of all sizes to improve customer experience and loyalty. It allows you to identify and pinpoint agents strengths, weakness and areas on which to focus training efforts.