

The Smarter Al[™] Bio Thermal Camera line-up

Version 1.1 | As seen on <u>The Smarter Al[™] Bio Thermal Camera line-up</u>

The world after the COVID-19 pandemic

The global <u>COVID-19 pandemic</u>, caused by the <u>SARS-CoV-2</u> virus, has exposed the vulnerability of the world as well as it's economy. Major events with a broad impact on people's lives and the economy will transform society profoundly. <u>9/11</u> is an excellent example of that, leading to permanent additional security measures in airports and sensitive sites. It's still early to grasp the full extent of the changes coming. However, to go back to "normal," multiple countries have introduced measures that are both reasonable and acceptable by the public to mitigate this pandemic and probably the next. The reopening of society will be on the ability to do three things:

- Transmission Mitigation: Social Distancing, Mask, etc.
- Contact tracing simplified.
- Detect sick and infectious people.

To mitigate this current pandemic as well as to help prevent the next one, AnyConnect is developing a new family of Al-driven and connected cameras: the Smarter Al Bio Thermal Camera line-up.





Smarter AI Bio Thermal Camera line-up overview



- ✓ Thermal & Optical Camera
- Calibrator for very high measurement accuracy
- ✓ Connectivity: Ethernet, LTE/4G, 5G, Wi-Fi
- Permanent or temporary installation
- Redundant cellular connectivity (2 SIM cards)
- ✓ Temperature measurement up to 3 meters
- ✓ Instant readings
- ✓ High throughput
- ✓ Simple installation
- Native display output on the camera



- Cloud-based system, no VMS required
- Internet-ready: streaming & security
- ✓ GDPR and privacy compliant
- Easy onboarding and setup
- Real-time video streaming
- Local and cloud video and data recording
- ✓ Android & iOS apps
- VMS compatible (on demand)
- ✓ Simple remote operation
- ✓ Centralized management through <u>Console</u>
- ✓ Integration with access control systems





- ✓ AI for high-accuracy fever detection
- ✓ Sensors: beamforming microphones, etc.
- ✓ Deploy AI to the edge, <u>Over-the-Air</u> (OTA) through <u>AI Containers</u>™
- Al Store has a lot of models helping with your business
- Health: safe distancing, mask wear, cough, sneeze, etc.
- ✓ Marketing: people profiling
- ✓ Security: facial recognition
- Privacy: face masking
- Optional: read the identities of patrons/visitors (ID reader) and store it securly in a GDPR compliant way



- ✓ Defense: barracks, bases, offices, ships, submarines, airports, etc.
- ✓ Education: campuses, schools, pre-schools, kindergartens, universities, etc.
- Entertainment: stadiums, concert halls, festivals, night clubs, amusement & theme parks, cinemas, etc.
- ✓ Finance: bank & insurance branches and offices, etc.
- ✓ F&B: restaurants, diners, canteen, bars, etc.
- ✓ Gambling: casinos; bingo halls; hippodromes; pachinko, etc.
- ✓ Government: office buildings, ministries, tax offices, etc.
- ✓ Healthcare: hospitals, clinics, private practices, etc.
- ✓ Offices: campuses, office buildings, factories, warehouses, logistic centers, etc.
- ✓ Public Security: border crossings, police stations, fire stations, courts, etc.
- Retail: malls, supermarkets, big-box retailers, shops, etc.
- ✓ Sports: stadiums, fitness centers, swimming pools, etc.
- ✓ Tourisme: touristic sites and attractions, cruise ships, etc.
- ✓ Transportation: airports, metros, rail, train stations, etc.
- ✓ Worshipping: churches, temples, synagog, mosques, places of worship, etc.



Installation Overview

Standard Density





People Screening Configuration	Screening Performance*
Single Channel with 2m / 6 feet social distancing	1800 people/hour
Single Channel with 1m / 3 feet social distancing	3600 people/hour
Single Channel with no social distancing	10000 people/hour



High Density





People Screening Configuration	Screening Performance*
Dual Channel with 2m / 6 feet social distancing	3600 people/hour
Dual Channel with 1m / 3 feet social distancing	7200 people/hour
Single Channel with no social distancing	15000 people/hour



Ultra High Density









People Screening Configuration	Screening Performance*
Triple Channel with 2m / 6 feet social distancing	5400 people/hour
Triple Channel with 1m / 3 feet social distancing	10800 people/hour
Single Channel with no social distancing	18000 people/hour

* Assumptions are that people are walking through at 3.6 km/h / 3.3 ft/s, without interruption in ideal conditions.



The Smarter AI[™] Bio Thermal Camera line-up runs AnyConnect Smarter AI[™] Camera Platform. What is this platform about?

AnyConnect's *Smarter* AI[™] Camera Platform is the equivalent of Android for cameras. With its powerful set of <u>software libraries</u> for cameras and an overarching cloud platform that makes a camera (such as Smarter AI[™] Bio Thermal Cameras) smarter.

With AnyConnect's <u>patented technologies</u>, the Smarter AI[™] Bio Thermal Cameras has a <u>guaranteed and low latency video & audio connections</u> through NATs, <u>especially wireless and cellular networks</u> & <u>cloud video recording</u>.

With AnyConnect Smarter AI[™] Camera Platform, the Smarter AI[™] Bio Thermal Camera runs AI-driven <u>computer vision</u> at the edge, in a <u>secure and data-</u> <u>protection-compliant</u> way. A <u>console</u> provides a full overview of all connections and offers granular control over the entire system.



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Smarter AI[™] Bio Thermal Cameras line-up in-depth



Detect sick and infectious people

AnyConnect Smarter AI[™] Bio Thermal Camera line-up enables you to deploy <u>edge AI</u>, securely, at scale, and <u>Over-the-Air (OTA)</u> through <u>AI Containers</u>[™]. AnyConnect offers an AI Store with ready to deploy AI Containers, made with AI Models and Applications from the best AI Model and Application makers in the business. AnyConnect AI Store helps you greatly to mitigate infectious disease transmission rates in your region and industry. Some examples of that are safe distancing, proper wear of mask, etc. The system can help your business with maximum attendance regulation. It can ensure that not more than a certain number of people are in your premises at the same time by counting people in and out and providing guidance to visitors and patrons through a display connected to the camera and audio messages.





Enforce transmission mitigation

AnyConnect Smarter AI[™] Bio Thermal Camera line-up is a high-accuracy, highthroughput, AI-driven mass fever detection system. With its high and ultra-high definition optical imager, as well as its high-accuracy <u>radiometric</u> thermal imager, AnyConnect Smarter AI[™] Bio Thermal Camera measures body temperature with very high accuracy. AnyConnect Smarter AI[™] Bio Thermal camera has a supercomputer-grade <u>AI Accelerator</u> as well as sensors, such as a <u>beamforming microphone array</u>. It enables AnyConnect <u>Smarter AI[™] Bio</u> <u>Thermal Camera</u>, to run advanced AI-driven detection such as detecting people coughing, sneezing, etc., at very high throughput.



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Contact tracing simplified

Many counties around the world are implementing <u>contact tracing</u> measures to understand the <u>chain of infection</u> rapidly. Contact tracing means registering visitors/patrons' identity and phone number. It is a tedious and expensive process, as it requires business owners to maintain a registry of their patrons, including name, phone number, etc. Data accuracy and security are essential, as well as following <u>privacy regulations</u>, such as <u>GDPR</u>. The AnyConnect Smarter AI[™] Bio Thermal Camera line-up can interface multiple ID document scanner technologies, and AnyConnect Smarter AI[™] Camera Platform can store the visitors/patrons' information securely and in compliance with privacy regulations.







Beyond mass fever detection

AnyConnect Smarter AI[™] Bio Thermal Camera line-up has a supercomputergrade <u>AI Accelerator</u> as well as sensors, such as a <u>beamforming microphone</u> <u>array</u>. With the AI Store, you can deploy AI Applications that are not only related to infection control. The system can help you with your operational and marketing challenges, such as queue monitoring, customer profiling, emotion detection, blacklist, etc.



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Flexible Installation

- Many existing Mass Fever Detection Systems on the market are an assembly of different kinds of devices without a common aesthetic, and those systems are usually designed to be installed on tripods, with visible cables as well as an NVR or a Tower PC nearby. AnyConnect Smarter AI[™] Bio Thermal Camera line-up has been specifically designed to be installed both temporarily and permanently.
- Temporary installations are rapid and straightforward to set up with power over USB Type
 C (<u>Power Delivery</u>) as well as it's entirely software-based configuration and calibration.
- Permanent installations allow for Power over Ethernet (<u>PoE</u>) and/or broad range <u>DC</u>
 <u>power</u> for both the camera and its calibrator as well as redundant power sources for both as well (<u>PoE</u> and <u>DC Power</u>).
- No NVR, PCs, or other devices are necessary. A dedicated corporate network is not needed either as AnyConnect Smarter AI[™] Bio Thermal Camera line-up can be connected to the internet through <u>Ethernet</u>, <u>Wi-Fi</u>, and <u>Cellular (4G/LTE & 5G</u>). Finally, the camera records locally on an SD card or an optional larger SSD within the camera, without requiring an external <u>Network Video Recorder</u> (NVR), <u>Network Attached Storage</u> (NAS), <u>Storage Area</u> <u>Network</u> (SAN) or a <u>Video Management System</u> (VMS).





Fever detected Fever detected ever detected Fever detected 39.4°

Flexible operations

The Smarter AI[™] Bio Thermal Camera line-up is flexible to fit within your business and not the opposite. It can be operated in four different ways or any combinations of such ways:

1. App on mobile devices

Operators have Android or IOs mobile phones and use AnyConnect App to monitor Smarter AI[™] Bio Thermal Camera in real-time or receive instant, push mode, alarm notifications (person with fever detected, etc.).

2. Local Display(s) connected to the camera

The Smarter AI[™] Bio Thermal Camera line-up accommodates displays directly connected to the camera (no additional NVR or PCs is required). Those displays can show live temperature reading as well as alarms to customers and local security operators.

3. PC Client / VMS

In this configuration, an operator has access to the Smarter Al[™] Bio Thermal Camera through a standard Video Management System (VMS) client. This configuration requires a connector with the specific Video Management System.

4. Remote Operator

Focus on your business and not on mass fever detection—sign-up with a licensed alarm monitoring company to handle the alarms with your system remotely. This mode doesn't require any <u>VPN</u>, <u>Firewall</u>, etc.







Centralized management

Manage your camera networks deployments from a single interface. Whether you manage them from AnyConnect <u>Console</u>, or by integrating AnyConnect <u>REST APIs</u> with your system, you'll have a simple way to manage users, cameras, access rights, health monitoring, and even have an understanding of the quality level of each connection between a camera and a client.



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Access-control & onboarding

AnyConnect Smarter AI[™] Bio Thermal Camera line-up doesn't need a <u>Video</u> <u>Management System</u> (VMS) to operate, nor a <u>Network Video</u> <u>Recorder</u> (NVR). <u>Access control</u> is native to AnyConnect Smarter AI[™] Camera Platform, as well as a rapid and foolproof <u>onboarding</u> system.







Natively connected

AnyConnect Smarter AI[™] Bio Thermal Camera line-up has been designed to be connected. It means that it doesn't need a dedicated corporate network with firewalls and VPN and expensive network administrators. It accommodates internet connectivity through <u>Ethernet</u>, as well as "difficult" networks, such as <u>Cellular (4G/LTE & 5G)</u> and <u>Wi-Fi</u>. Thanks to <u>Instant Connections</u> as well as <u>Adaptive Bitrate Streaming</u>. AnyConnect Smarter AI[™] Bio Thermal Camera line-up accommodates 2 SIM cards for redundant cellular connectivity.



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Edge Al

Most existing 3rd party cameras today have no, or minimal <u>HAAR</u>-based video analytics, running on a <u>DSP</u> or a <u>CPU</u>. The Smarter AI[™] Bio Thermal Camera lineup comes equipped with a supercomputer-grade <u>AI accelerator</u>. This powerful AI Accelerator enables you to run multiple AI Models at the same time. The Smarter AI[™] Bio Thermal Camera line-up supports AnyConnect Smarter AI[™] Camera Platform's novel way to deploy deep learning-based AI Models to the edge at scale through <u>AI Containers</u>.



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 Smarter Al™ Bio Thermal Camera
Line-up





Let's talk about protecting your business from pandemics.

Talk to an expert

