Frequently Asked Questions

Integra® & Integra® View

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Integra® Overview

1. What is Integra® and how does it work?
   Integra® is an all-in-one device comprising Control Center, an integrated PoE+ switch and up to 24TB of storage for video recordings. Integra® supports up to two monitors and can view, manage and record up to 24 simultaneous video streams. It is designed for easy installation, with performance guaranteed.

2. What order options are there for Integra®?
   Integra® is available in 6 variants; there are 8-, 16- and 24-port models, each with two storage options. All Integra® switch ports support powering of PoE+ devices, with a maximum power budget across all switch ports as stated on the datasheet. Once the maximum power budget is reached, Integra® will not provide power to subsequent cameras. The max power budget provides PoE (15w) power across all camera ports.

3. What software is pre-installed?
   Integra® comes pre-installed with Control Center, NVR-AS, License Server, Control Center Web/Mobile Server, Meinberg NTP server, IndigoVision VPN and DHCP server (on the built-in switch).

How do I order?

4. How do I order an Integra®?
   For standalone systems, simply order the Integra® 8, 16 or 24. Monitors, USB keyboards and mice need to be ordered separately.
   For multiple-Integra® systems, please see the section later in this document on Integra® View.

5. Do I have to purchase SUP for an Integra®?
   No. There is no mandatory Software Upgrade Plan (SUP) for Integra®.
   An “Integra® Software Upgrade (per device connection)” fee applies for customers wishing to upgrade to the next major Control Center release. This fee is payable at the time of upgrade – it does not need to be ordered together with the Integra®.

6. How do I order Integra® Software Upgrade?
   Product code 321000 “Integra Software Upgrade (per device connection)” is on the IndigoVision price list. As the description suggests, this is payable for each available device connection (channel) on your Integra® (regardless of how many channels are actually in use). So for an Integra 8, it would be necessary to order 8 x 321000, while for Integra 16 you would need to order 16 x
7. **Do I have to pay for device connection licenses separately from the Integra®?**  
No. All Integra® are pre-licensed with device connection licenses to match the number of camera ports. No additional licenses are required to View, Manage or Record 8, 16 or 24 channels of video on each Integra®.

8. **How do I order more device connection licenses for my Integra®?**  
Each Integra® will View, Manage and Record up to their number of channels (8, 16 or 24). Multiple Integra® may be connected together to increase the device connections available in which case an Integra® View Workstation is required to manage the device connections across the multiple Integra®.

9. **When purchasing an Integra® do I need to purchase any other hardware?**  
In addition to Cameras or encoders a Monitor, USB Keyboard and USB mouse must be purchased separately to the Integra®.

**System Design**

10. **Can I install IndigoUltra, IndigoPro or IndigoLite Control Center on my Integra®?**  
No. Integra® is completely independent from IndigoLite®/Pro®/Ultra®, and there is no migration path to these Control Center Tiers.

11. **Can I use Integra® or Integra® View together with my existing Control Center installation?**  
In general, no. Integra® is completely independent from IndigoLite®/Pro®/Ultra® and cannot be combined with these Control Center tiers. The exception to this is if you want to view the cameras that are connected to your Integra device in an existing Control Center system – that is possible ONLY IF you have sufficient license channels available on your Control Center License Server (and if the Integra and the Control Center machine are visible to each other on the network, of course).

12. **How many device connection licenses can I have on my Integra®?**  
Integra® come with the same number of device connection licenses as there are camera ports on the device (8, 16 or 24). It is not possible to increase the channel count on an Integra® device (for example if you connect a downstream switch to the Integra® and want to view more than 8/16/24 channels). The only way to increase the channel count in an Integra®/Integra® View system is by adding more Integra® and an Integra® View Workstation.
13. **How many devices can I record on my Integra®?**

Integra® is designed to support recording a single stream from each directly attached device. You cannot record more than 8, 16 or 24 streams when using an Integra®, even when attaching multi-channel devices that are allowed by the device connection license.

14. **Where is the License Server installed?**

Integra® comes from the factory with the License Server pre-installed on the unit. In the case of an Integra® View system, the License Server is on the Integra® View Workstation and all Integra® should point to that central License Server.

15. **Where is the Control Center site database held?**

Integra® ships from the factory with the Control Center site database on the device. In the case of an Integra® View system, the administrator user needs to set up the site database on the Integra® View Workstation and include all Integra® NVRs and cameras in that site database. The individual Integra® can then be pointed at the central site database on the Integra® View Workstation.

16. **Is the software on the Integra® 8 the same as the Integra® 16 / 24?**

Yes. There is just the one version of Control Center for all Integra®. The software features are identical across all hardware variants. Please see page 2 of the Integra® Software datasheet for a list of the features included.

17. **Can I connect multi-channel devices to Integra®?**

Yes. The same rules apply as for the IndigoLite®/Pro®/Ultra® versions of Control Center – so a 4-channel BX100 Encoder consumes one of the licenses on an Integra®, an 8-channel BX130 Encoder consumes 2 licenses, and a 16-channel BX130 Encoder consumes 4 licenses. However please note that as described in question 13 above, the Integra® cannot record more channels than the number of PoE ports on the Integra® device (8/16/24)

**Integra® View**

18. **What is Integra® View?**

Integra® View is the term for a system containing multiple Integra® linked together into a centralized system. It always includes an Integra® View Workstation, which is available in two form factors depending on the total number of channels in the Integra® View site. For sites containing up to 24 channels, the Integra® View Mini Workstation is used – this is the same form factor as the Mini Workstation that you may be familiar with from our price list. For sites containing more than 24 channels, the Integra® View Mid Workstation is used – this is a similar form factor to the Hybrid NVR Workstation. The Integra® View Workstation runs Control Center with an Integra® View
19. **How do I migrate from a standalone Integra 8/16/24 to an Integra View system?**

When migrating from a standalone Integra to an Integra View, all the licensed software (Control Center, NVR etc) on each Integra 8/16/24 needs to be “pointed” to the License Server on the Integra View Workstation. In addition the administrator user sitting at the Integra View Workstation will need to discover all cameras/encoders and NVRs on each Integra and add them to the site on the Integra® View Workstation. Then the setup of the Integra® View Workstation becomes the same as for any Control Center installation (setting up recording jobs, sequences, salvos, maps, users etc). See the Integra® Appliance User Guide for detailed instructions.

20. **What are the Integra® View workstations and which one is right for me?**

There are two models of Integra® View Workstations, these are as follows:

- 980610 Integra View Mini Workstation (G2) (up to 24 Channels)
- 980613 Integra View Mid Workstation (G2) (Unlimited Channels)

The Integra View Workstation you will need to order depends on the total number of channels in your Integra® View system as a whole.

21. **How do I upgrade from Integra to another?**

There is no upgrade path from the Integra® View Mini Workstation to the Integra® View Mid Workstation, because the hardware is different for the two Workstations. If you run out of licenses on the Integra® View Mini Workstation you will have to move to an Integra View Mid Workstation, which as mentioned is a new hardware platform.

All other Integra® View “bands” that were previously on the price list have been removed to make the Integra® View Workstations easier to manage.

22. **Can I load the Integra® View software on a non-Integra® View workstation?**

No. Integra® View software comes pre-installed on the Integra® View Workstation only – it will NOT be made available for installing on other PC’s.

23. **Can I use Control Center Web on an Integra® View workstation?**

You can use Control Center Web on an Integra® View Workstation, however it is only supported on the Integra® View Mid Workstation. For full performance figures please check the Control Center performance guide.
Technical Insight

24. **How many users can I have on an Integra®?**
The same rules apply as for the IndigoLite®/Pro®/Ultra® versions of Control Center – you can have unlimited client PCs pointing at the Integra®.

25. **Can I use the Integra® anywhere on my network?**
Integra® is designed to be located at your local monitoring area with local HDMI / DisplayPort connection to monitors and USB connection to keyboard and mouse. In addition to the 8, 16 or 24 switch ports, Integra® provides LAN/WAN Ethernet ports for connection to additional network switches. These allow freedom to design your network around your camera layout with remote PoE switches located at the edge close to the cameras with a link back to an Integra® in your local monitoring area.

26. **Do I need 3rd party Windows-NVR device connection licenses?**
No. Each Integra® is shipped pre-licensed as an NVR.
There is no support for any additional 3rd Party Windows NVR’s within an Integra® system.

27. **Can I use an IndigoVision NVR-AS 3000/4000 with an Integra®?**
Yes (as long as the NVR-AS 3000/4000 is running version 15.2 or later). However, note that the only reason for connecting an NVR-AS 3000/4000 to an Integra® system is to extend the available storage and retention period. If customers want to increase the channel count, the only way they can do that is by purchasing additional Integra® as part of an Integra® View system.

28. **Can I use a 3rd party Windows NVR in an Integra® or Integra® View system?**
No. Integra® supports NVR-AS 3000/4000 connections only, no support for 3rd party Windows NVR.

29. **Can I connect a “standard” Control Center PC to Integra®?**
Yes, you can point Control Center running on a standard workstation at the License Server on an Integra® device and manage and view live and recorded video etc. Multiple workstations can connect to a single Integra®.
In order to view or administer more than a single Integra® from a workstation, you will need an Integra® View Workstation.

30. **Can I connect a ‘spot monitor’ to Integra®?**
The second monitor connection of Integra® may be used as a spot monitor. It is also possible to configure a Mini Workstation as a spot monitor if there are cable length restrictions between the Integra® and spot monitor, or if both Integra® monitor outputs are required for local display within the monitoring area.

31. **Can I install Integration Modules on Integra®?**
Yes, as long as your Integra® is running Control Center (and License Server, and NVR) version 16.0 or later. Earlier versions of Control Center did not allow integration modules to coexist on the same machine as the License Server.

32. **Can I upgrade the hard drive capacity on Integra®?**
It is currently not possible to upgrade the storage capacity on an Integra. If a higher capacity is required then a higher capacity of Integra® will need to be purchased.

33. **Can my Integra® View Workstation act as a Federated License Server?**
Yes, from Control Center v15.3, Federated License Server is supported. Your Integra® View system must be running Control Center 15.3 or later in order to use this feature.

**Who can I contact?**

34. **What do I do if I want to purchase an Integra®?**
Please contact your IndigoVision Sales representative. Orders can be placed with order.mgmt@indigovision.com

35. **What do I do if I am having a technical problem with an Integra®, Integra® View Workstation, or the software on them?**
Contact IndigoVision’s Technical Support team at technical.support@indigovision.com

36. **How can I obtain demo stock of Integra®?**
IndigoVision Sales Engineers should have demo units.
Loan agreements are required for any demo units outwith the demo stock provided to your local Sales Engineering team.

**Competitive performance comparison**

37. **How does Integra® stack up against our nearest competitor?**
Very well. In a side-by-side test with our nearest competitor’s equivalent appliance, Integra® used roughly half the CPU when recording and displaying the same number of live streams.
Details:
IndigoVision variant tested: 980605 Integra 24, 24TB with 24 Camera License
Competitor’s product tested: 24-port 24TB unit with license equivalent to ours.

Cameras used: A mix of IndigoVision BX630, BX430, BX620, BX410, GX620
Camera streams configured: Profile 1 = 1080p, Profile 2 = SIF

Dynamic Profile Switching enabled on IndigoVision Integra®. Equivalent technology enabled on competitor’s product.

Test case: On both appliances, recording 23 cameras while simultaneously displaying two windows each containing 23 cameras (total of 46 cameras displayed) in Live mode.
(Note: the reason there were 23 cameras in this test rather than 24 was purely because one of the cameras was offline. We have tested with various numbers of cameras and the CPU load on Integra® was consistently less than 50% that of the competitor’s appliance.)

Results:

<table>
<thead>
<tr>
<th></th>
<th>IndigoVision CPU usage: 33%</th>
<th>IndigoVision memory usage: 25%</th>
<th>Competitor CPU usage: 87%</th>
<th>Competitor memory usage: 47%</th>
</tr>
</thead>
</table>

The competitor’s appliance became unresponsive at this load, while the IndigoVision Integra® was operating very comfortably. Digitally zooming in on just one of the 46 viewing panes on the competitor’s unit caused the CPU to jump to 99%, while the IndigoVision Integra® CPU rose to around 41%.
Screenshot from IndigoVision Integra® (with all 46 streams digitally zoomed out):

<table>
<thead>
<tr>
<th>CPU</th>
<th>33% 3.71 GHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>3.9/15.9 GB (25%)</td>
</tr>
<tr>
<td>Disk 0 (C: E: F:)</td>
<td>7%</td>
</tr>
<tr>
<td>Disk 1</td>
<td>9%</td>
</tr>
<tr>
<td>Ethernet</td>
<td>Not connected</td>
</tr>
<tr>
<td>Ethernet</td>
<td>Not connected</td>
</tr>
<tr>
<td>Ethernet</td>
<td>S: 2.8 R: 134 Mbps</td>
</tr>
</tbody>
</table>

Screenshot from competitor’s appliance (again with all 46 streams digitally zoomed out):

<table>
<thead>
<tr>
<th>CPU</th>
<th>87% 3.25 GHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>3.7/7.9 GB (47%)</td>
</tr>
<tr>
<td>Disk 0 (C:)</td>
<td>1%</td>
</tr>
<tr>
<td>Disk 1 (D:)</td>
<td>15%</td>
</tr>
<tr>
<td>Ethernet</td>
<td>Not connected</td>
</tr>
<tr>
<td>Ethernet</td>
<td>S: 0 R: 1.5 Mbps</td>
</tr>
<tr>
<td>Ethernet</td>
<td>S: 0 R: 141 Mbps</td>
</tr>
</tbody>
</table>