

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курган (3522)50-90-47
Курск (4712)77-13-04
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Ноябрьск (3496)41-32-12
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саранск (8342)22-96-24
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Улан-Удэ (3012)59-97-51
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

syn@nt-rt.ru || <https://sonymed.nt-rt.ru>

NU-IP3T

IP Converter



Transmits 4K, HD, and SD video streams to anywhere over the network

The NU-IP3T converts medical imaging signals including 4K, HD, and SD video and control signals to IP data and transmits to a variety of medical equipment. In combination with the NU-IP3R (IP converter receiver), visually lossless video or uncompressed video with low latency of less than 1 frame can be transmitted/received through network interfaces.

The NU-IP3T can support the following three outputs simultaneously:

1. A native video stream as a primary output used for live viewing in the operating room.
2. A bandwidth-optimized stream (proxy stream) as a secondary output is also available for the medical team outside of the operating room (offices or lecture rooms in the hospital). The proxy stream is transported through the hospital network without risking network congestion.

The NU-IP3T offers a secure SSL + AES-128 with GCM rolling key scheme encryption to protect privacy.

3. A 3G-SDI baseband signal is also offered by the NU-IP3T as a third output for convenient connection as a standard safetyline interface to the primary monitor.

Key Features

Flexible Network Architectures

Any video stream from a connected medical device can be transmitted over a CAT5e (or higher) cable, or fiber network cables. Copper cable can be used with the existing infrastructure under a low network load outside the OR.

A Wide Variety of Video Formats

Video from SD and HD, 2D and 3D, all the way up to 4K@60fps 4:4:4 video output is supported and output at the correct resolution for the connected monitor. Even non-standard SD video inputs can be transmitted and output as a pixel-perfect dot-by-dot representation on a modern 16:9 monitor where required without scaling or stretching using the full screen. An optional license is available (NU-IP3TE) for 4K resolution. For the details of the supported resolution and signal, please contact Sony dealer.

Data Safety

Data and command interfaces to the NU-IP3T are encrypted using SSL. Bandwidth optimized streams are always secured with AES-128 encryption used with a GCM rolling key scheme. This prevents third-party eavesdropping, spoofing, and data-tampering.

GPIO Interface

The NU-IP3T is equipped with a GPIO interface to trigger start/stop commands from connected devices. When surgeons need to capture still images or make a recording of the video during medical procedure, the buttons on endoscopic devices or foot-switches can be used to control the NUCLeUS functions via the GPIO interface.

KVM Function

By connecting a USB cable as well as a video cable, the NU-IP3T can send keyboard and mouse signals to the connected device without specialized extra hardware or cabling.

When the NU-IP3T's video is switched to a NU-IP3R, a keyboard and mouse connected to that receiver can be used to remotely control the transmitter's connected device.

As staff switch view from one source to another, their keyboard and mouse follow their workflow and allow flexible control of multiple devices.

User Feedback

The digital operating room gives user feedback on various system levels. The system LED indicates the power on and the proper working of the NU-IP3T, and displays specific blinking patterns indicating the loss of a network, the absence of an IP address, making it easy for users to diagnose any problem.



Rear Panel

Specifications

Video Specifications

Inputs	Up to 4K @ 60 fps 4:4:4 ^{*1}
Outputs	Native and proxy streams, still pictures
Third Output	3G-SDI safety line/SMPTE 424M

Connectivity

USB	USB Type A (Reserved for future use) (1) USB Type B (KVM Interface) (1)
Control and Data	SFP+ (Ethernet network) (2) ^{*2} RJ-45 (Ethernet network) (1) RJ-45 (for serial control) (1) RJ-11 GPIO 5pin, GND 1pin (1)
Video Connectors (in)	3G-SDI (4K/HD) (4), DVI-I (1), Display Port 1.2 (1), HDMI 2.0 (1) VGA ^{*3} /Component ^{*3} /YC ^{*3} /Composite video ^{*3}
Power	AC Adaptor AC-82MD is required (not included)
Device Control	RS-232 (RJ-45) serial interface for control to other devices

Functions

Encryption	SSL + AES-128 with GCM rolling key scheme (Proxy)
------------	---

General

Power Requirements	+24 V DC
Input Current	2 A
Operating Temperature	0 °C to +40 °C (32 °F to 104 °F)
Operating Humidity	30% to 85% (No condensation allowed)
Operating Pressure	700 hPa to 1,060 hPa
Storage and Transport Temperature	-20 °C to +60 °C (-4 °F to 140 °F)
Storage and Transport Humidity	20% to 90%
Storage and Transport Pressure	700 hPa to 1,060 hPa
Noise Level	28 dBA (20 °C (68 °F), 1 m)
Mass	1.0 kg (2 lb. 3.2 oz)
Dimensions (W x H x D (excluding projection))	approx. 189 x 47 x 157 mm (approx. 7 1/2 x 1 7/8 x 6 1/4 in.)
Supplied Accessories	HDMI Cable Clamp (1), Before Using This Unit (1), CD-ROM (1), Service Contact List (1)

*1. For details of the supported signal types, resolutions and frequencies, please refer to the Instruction Manual.

*2. Optional SFP+ module is required.

*3. Exchange adaptor is required.

Uncompressed video requires 10G fiber network interfaces. Availability may vary depending on the country.

For further information please contact your nearest Sony dealer.

Latency of video stream varies depending on usage conditions.

This product is distributed to the US and EU as a medical device and satisfies product safety standards (e.g. IEC 60601-1).

For more details, please contact your nearest Sony sales office or an authorized dealer.

Related Products

IP Converter (Receiver)

NU-IP3R

IP Converter 4K License

NU-IP3TE

Switching & Routing

Pro License

NU-SR30E

Pro+ License

NU-SR30F

Network System Manager

NU-NM30E



AC Adaptor

AC-82MD



Signal Cable

SMF-405



SFP+ Transceiver Module

OTM-10GSR1



По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курган (3522)50-90-47
Курск (4712)77-13-04
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Ноябрьск (3496)41-32-12
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саранск (8342)22-96-24
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Улан-Удэ (3012)59-97-51
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

syn@nt-rt.ru || <https://sonymed.nt-rt.ru>