

## По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72  
Астана (7172)727-132  
Белгород (4722)40-23-64  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
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  
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

Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
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  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15

Рязань (4912)46-61-64  
Самара (846)206-03-16  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Тверь (4822)63-31-35  
Томск (3822)98-41-53  
Тула (4872)74-02-29  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Ярославль (4852)69-52-93

**Единый адрес:** [oci@nt-rt.ru](mailto:oci@nt-rt.ru) **Веб-сайт:** [www.oi.nt-rt.ru](http://www.oi.nt-rt.ru)

## Детектор частиц IDS 2030 OI Analytical

Use the IDS 2030 Charged Particle Detector to detect charged particles in the atmosphere or a vacuum. The rugged IDS-2030 delivers spatially-resolved answers fast.

We created the IonCCD by adding a conductive layer to a photosensitive CCD, a detector using the robust yet simple technology you trust in your smartphone and digital camera. The conductive layer blocks out photons but will respond to all particles that are carrying a charge.



The IonCCD is optimized for the detection of positive ions having a wide range of particle energies; from thermalized ions that you can find in drift tube and soft landing experiments, to accelerated ions in mobility and mass spectrometers. As a true charge detector, the signal response of the IonCCD is independent of the energy of the impacting particle, its mass, and the incident angle. The 2126 detector elements (pixels) of the IonCCD will present you with pictures of ions in unsurpassed resolution.

The IonCCD sensor comes on a ceramic substrate to reduce outgassing in vacuum applications, and is enclosed in protective aluminum housing for safe handling and easy mounting. The complete IDS 2030 includes a camera controller, the IonCCD sensor, a power supply, and cables. It is shipped in an airtight instrument case for easy storage and safe transport.

### IDS 2030 Features:

True charge detector - Independent of particle energy, particle mass, and incident angle

Pressure independent charge detection – From high vacuum to above ambient pressure

Linear detector array - 2126 detector elements with a pitch of 21  $\mu\text{m}$

Low outgassing detector – Detector carrier is a ceramic PCB

Synchronization – Spectra acquisition can be synched using a trigger pulse

CE certified – FCC, RoHS, and WEEE

## Size

Controller 10.25 in L X 7.0 in W x 2.95 in H

Sensor 4.0 in L X 2.3 in W x 0.6 in H

## Weight

Controller 2.3 lbs.

Sensor 0.34 lbs.

**Power for external power supply** 100 - 240 VAC, 50/60 Hz, 2.0 A

**Power, Internal** 24 VDC

**Power Consumption (max)** 20 W

**Power Consumption (nominal)** 14 W

**Operating Temperature** 5 °C - 40 °C

**Storage Temperature** 5 °C - 40 °C

**Relative Humidity** 95 %

**Variable Integration time** 80 μs – 5.24 s

**Frame time (min)** 2.76 ms

**Sensitivity** 0.5 fA/ pixel/s with S/N =3

**In frame dynamic range** 5 X 10<sup>3</sup>

**External trigger** Pulse rising 0 VDC- 12 VDC;  
Low max. 0.6 VDC, high min. 3 VDC

## Detector

IonCCD Linear detector array, charge-coupled device: 51 mm, 2126 active pixels each 21  $\mu\text{m}$  wide and 1500  $\mu\text{m}$  high. Effective area 88%.

Charge detector Independent of pressure, particle mass and incident angle. Detects positive ions, negative ions, and electrons.

Certifications FCC, CE, RoHS

### По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72  
Астана (7172)727-132  
Белгород (4722)40-23-64  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
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  
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

Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
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  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15

Рязань (4912)46-61-64  
Самара (846)206-03-16  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Тверь (4822)63-31-35  
Томск (3822)98-41-53  
Тула (4872)74-02-29  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Ярославль (4852)69-52-93

**Единый адрес:** [oci@nt-rt.ru](mailto:oci@nt-rt.ru) **Веб-сайт:** [www.oi.nt-rt.ru](http://www.oi.nt-rt.ru)