

## Chromatography On Demand - AlphaCOD -



A Fujitsu AI solution to detect chemical traces in samples.

*Note: The information in this datasheet might be superseded by the online version available on [online AlphaCOD Datasheet](#).*

### Introduction

The Fujitsu **Chromatography On Demand** solution – **AlphaCOD** – is designed to assist laboratories' technicians in detecting chemical traces in samples, like pesticide in food or in water, dioxins in air, steroids in blood or in plasma, etc. Typical customers are analytical chemistry laboratories using mass spectrometry and chromatography systems.

**AlphaCOD** solution provides faster and more accurate chromatography analysis using an AI cloud service. It enhances greatly the efficiency and capabilities of chemical compound profiling for more effective decision-making and lower cost in multiple fields, like agri-food, environmental monitoring, healthcare, research.

### Challenges

Analyzing food, biological or product samples is essential to isolate contaminants or establish composition. Moreover, trace detection is escalating rapidly, driven by consumer choice and organic farming, medicines, and regulations. However, current processes are manually intensive and fallible. In addition, laboratories are facing limited availability of skilled personnel and difficult mobility between the chromatography' solutions.

### Solution

**AlphaCOD** solution automates chromatography sample analysis by using an AI assistant that is trained on several hundreds of thousand samples to automatically categorise the traces into detected or not detected. Integrated with a laboratory ERP platform it brings data analytics closer to business operations.

### Outcomes

Samples can be processed much faster. **AlphaCOD** AI Assistant eliminates human error by removing manual operations. The intuitive and familiar interface available within **AlphaCOD** makes it easy to use. Extensible, adaptable, and integrated approach enables digital transformation of laboratories.

### Scope of the Solution

**AlphaCOD** is a Software as a Service (SaaS) solution. **AlphaCOD** AI Assistant is priced by number of tokens that are processed by the laboratory each year. Two offerings are available to meet the needs. Both offerings include all **AlphaCOD** updates and associated support (9x5) for 1 year.

#### Premium offering

**AlphaCOD** Premium offering includes the solution usage for:

- 10 users
- Automatic data ingestion for 1 laboratory
- Unlimited Scanners
- Pay per use **AlphaCOD** AI Assistant

#### Platinum offering

On top of the Premium features, **AlphaCOD** Platinum offering includes the solution usage for:

- Unlimited Users
- Unlimited Laboratories
- Connectors with local SI
- Possibility to on-premises installation

#### Token Packs

The laboratory buys one or several **Packs** of tokens to match the volume of analysis from the Chromatograph that will be processed by **AlphaCOD** AI Assistant for 1 year. Seven different Token Packs are available for each offering:

- 5k Pack: to treat 5 000 analyses with **AlphaCOD** AI Assistant for 1 year.
- 10k Pack: to treat 10 000 analyses with **AlphaCOD** AI Assistant for 1 year.
- 25k Pack: to treat 25 000 analyses with **AlphaCOD** AI Assistant for 1 year.
- 50k Pack: to treat 50 000 analyses with **AlphaCOD** AI Assistant for 1 year.
- 100k Pack: to treat 100 000 analyses with **AlphaCOD** AI Assistant for 1 year.
- 200k Pack: to treat 200 000 analyses with **AlphaCOD** AI Assistant for 1 year.
- 400k Pack: to treat 400 000 analyses with **AlphaCOD** AI Assistant for 1 year.

At the end of each Pack it is possible to easily prolongue the existing Pack if needed for another year!



## Solution in Detail

### Content of the Solution:

The solution contains different components including the Fujitsu AI Assistant that will analyse the raw data which is produced by Customer's Chromatograph. The automated AI analysis by the Fujitsu AI Assistant will generate a comprehensive webbased interactive report supporting the lab-technician in his daily work.

### Solution Options:

Several options are available when the laboratory is interested in AlphacOD solution:

- Activate the Right to Use if this is the first time to use AlphacOD solution.
- Buy one or several Packs of tokens that can be treated by AlphacOD AI Assistant in 1 year.

	Premium	Platinum
Cloud	Yes	Yes
On-Premise	No	Yes
#Labs	1	Unlimited
#Users	10	Unlimited
#Devices	Unlimited	Unlimited
AI-Assistant	Yes	Yes
Multi-Readers	Yes	Yes
Full automation	Yes	Yes
Token Transfer	Yes (20%)	Yes (20%)
Support SLA 9x5	Yes	Yes
Updates	Yes	Yes
Connectors	No	Yes

### AlphacOD Right to Use

If the laboratory is a first-time customer for AlphacOD solution, the laboratory will need and activate the AlphacOD Right to Use. The Right to Use is a separate document that the customer will receive and contains the customer's official AlphacOD Premium or Platinum serialnumber. This activation will trigger the setup of a private and secure instance of AlphacOD Cloud platform, dedicated to the laboratory's information. This private and secure instance is used to store noncritical information (see also section Data gathering and SaaS compliancy) during the duration of the contract and the processing of the analysis data.

### AlphacOD Premium Offering

AlphacOD Premium offering includes:

**10 users:** 10 concurrent laboratories' technicians can connect and work simultaneously in the Graphical User Interface available in AlphacOD solution.

**Automatic data ingestion for 1 laboratory:** 1 laboratory (one logical site) can use automatic data ingestion available in AlphacOD solution. In practice, there is one Fujitsu COD

Drive component (small Python agent produced by Fujitsu) installed on 1 laboratory server which will automatically read the raw data file of the scanners when they are produced and send them to AlphacOD solution for interpretation by AlphacOD AI Assistant.

**Unlimited Scanners:** AlphacOD solution can ingest files from unlimited number of scanners, through Fujitsu COD Drive component. This implies Fujitsu COD Drive must have read access to the raw data files that are produced by these scanners. This is typically achieved using a Network Attached Server (NAS) disk, shared by all the scanners to store the raw analysis data file.

**Pay per use AlphacOD AI Assistant:** This is the key component of AlphacOD solution. AlphacOD AI Assistant interprets the raw data from the laboratory analysis, compute information for each molecule like the RT, RRT, SNR, LOQ, Ion's ratios, etc... With all computed information, AlphacOD AI Assistant automatically categorize the molecules into detected or not detected, using AlphacOD AI model trained on several hundreds of thousand samples. AlphacOD AI Assistant is running in Fujitsu Cloud platform, to leverage the latest Fujitsu AI servers for optimal performance.

### AlphacOD Platinum Offering

On top of the Premium features, AlphacOD Platinum offering includes:

**Unlimited Users:** unlimited concurrent laboratories' technicians can connect and work simultaneously in the Graphical User Interface available in AlphacOD solution.

**Unlimited Laboratories:** unlimited laboratories or departments or production lines can use automatic data ingestion available in AlphacOD solution. In practice, there is a Fujitsu COD Drive component (small Python agent produced by Fujitsu) installed on the laboratory servers which will automatically read the raw data file of the scanners when they are produced and send them to AlphacOD solution for interpretation by AlphacOD AI Assistant.

**Connectors with local SI:** AlphacOD solution can be connected to the existing Laboratory Information Management Systems (LIMS) to export analysis meta information before the automatic treatment by AlphacOD AI Assistant, and possibly import results and generated reports into the LIMS at the end of the treatment. All connectors developed specifically for the laboratory, if any, are maintained by Fujitsu during the time of the contract.

**Possibility to on-premises installation:** Platinum offering opens the possibility to install AlphacOD solution on premises, on one server or virtual machine of the laboratory. (see also Prerequisites)

### AlphacOD Token Packs

A Token Pack ("Token Pack" or "Pack") provides a certain amount of tokens to be processed by the AI Assistant.

A token is one examination done by the Fujitsu AI Assistant. For example, examining one sample on Mycotoxins (detected or not) would consume one token.



There are 7 Token Packs available for both Premium and Platinum offerings. All the 7 Packs can be combined to buy the appropriate volume of tokens that will be processed by AlphacOD AI Assistant for 1 year.

- 5k Pack: to treat 5 000 analyses with AlphacOD AI Assistant for 1 year.
- 10k Pack: to treat 10 000 analyses with AlphacOD AI Assistant for 1 year.
- 25k Pack: to treat 25 000 analyses with AlphacOD AI Assistant for 1 year.
- 50k Pack: to treat 50 000 analyses with AlphacOD AI Assistant for 1 year.
- 100k Pack: to treat 100 000 analyses with AlphacOD AI Assistant for 1 year.
- 200k Pack: to treat 200 000 analyses with AlphacOD AI Assistant for 1 year.
- 400k Pack: to treat 400 000 analyses with AlphacOD AI Assistant for 1 year.

The Pack schema allows the laboratory to start small in using AlphacOD solution and grow or adapt the volume of analysis from the Chromatograph that are treated by AlphacOD AI Assistant when needed.

To get a better price per token, it is more interesting to buy a greater number of tokens.

If the number of tokens bought is processed before 1 year, the laboratory can buy additional Packs for 1 year. The renewal of the Packs is at the anniversary of the latest order.

The start and end date of each Pack is triggered by the customer online activation on the Fujitsu Portal and will remain activated during 1 year from activation date of that Pack.

If the number of tokens bought is not used during the 1-year period, maximum 20% of the total amount of bought tokens can be transferred for up to one year, limited to the expiry of last active Pack.

Each Pack requires an activation by the laboratory to trigger the 1-year usage and support term.

At the end of each Pack it is also possible to easily prolongue the existing Pack if needed for another year!



## Solution Support

**Alphacod** solution includes standard support schema.

If laboratory's technician faces an issue while using **Alphacod** solution, he/she may call Fujitsu hotline (L1 support), available during local business hours. Fujitsu hotline will gather all information requested for the case investigation by Fujitsu L2 and L3 support. Workarounds to solve the problem might be proposed to the laboratory.

**Alphacod** L2 and L3 support is carried out by Fujitsu Professional Support Engineers during business hours in France. The response time is on a best effort basis. Normally, the expected response time is within 1 French business day.

The start and end date of the Support of each Pack is triggered automatically by the customers online activation of each **Alphacod** Token Pack on the Fujitsu Portal and will remain activated for 1 year from the activation date of that Pack.

All support will be remote support.

## Travel Expenses

Travel cost is not included in the **Alphacod** solution. In case local support or maintenance activity is needed such local service must be requested and ordered by the customer based on an individual offer of Fujitsu. (Daily service rates, travel costs / flights, hotel, ....).

## Example

For a **new** customer that needs 150.000 Premium tokens to cover the first year, the laboratory needs:

- 1 x Right to Use
- 1 x 100k Token Pack Premium
- 1 x 50k Token Pack Premium

For an existing customer that needs 150.000 Premium tokens each year the laboratory needs:

- 1 x 100k Prolongation Token Pack Premium
- 1 x 50k Prolongation Token Pack Premium

For an existing customer that needs 150.000 Premium tokens renewed and have 25.000 extra Tokens the first time the laboratory needs:

- 1 x 100k Prolongation Token Pack Premium
- 1 x 50k Prolongation Token Pack Premium
- 1 x 25k Token Pack Premium

## Product Codes

### Order codes

#### Fujitsu AlphaCOD – Chromatography On Demand

##### Premium

**ALPHA-COD PREMIUM** (Alphacod Right to Use Premium)

- FSP:G-SW12660PRCOD** (Alphacod - Premium 5k Pack - 1Y)
- FSP:G-SW12C60PRCOD** (Alphacod - Premium 10k Pack - 1Y)
- FSP:G-SW12G60PRCOD** (Alphacod - Premium 25k Pack - 1Y)
- FSP:G-SW13560PRCOD** (Alphacod - Premium 50k Pack - 1Y)
- FSP:G-SW13960PRCOD** (Alphacod - Premium 100k Pack - 1Y)
- FSP:G-SW13N60PRCOD** (Alphacod - Premium 200k Pack - 1Y)
- FSP:G-SW13Q60PRCOD** (Alphacod - Premium 400k Pack - 1Y)

##### Platinum

**ALPHA-COD PLATINUM** (Alphacod Right to Use Platinum)

- FSP:G-SW13S60PRCOD** (Alphacod - Platinum 5k Pack - 1Y)
- FSP:G-SW13T60PRCOD** (Alphacod - Platinum 10k Pack - 1Y)
- FSP:G-SW13U60PRCOD** (Alphacod - Platinum 25k Pack - 1Y)
- FSP:G-SW13V60PRCOD** (Alphacod - Platinum 50k Pack - 1Y)
- FSP:G-SW13Y60PRCOD** (Alphacod - Platinum 100k Pack - 1Y)
- FSP:G-SW13Z60PRCOD** (Alphacod - Platinum 200k Pack - 1Y)
- FSP:G-SW14260PRCOD** (Alphacod - Platinum 400k Pack - 1Y)

### Prolongation Order codes

#### Fujitsu AlphaCOD – Chromatography On Demand

##### Premium

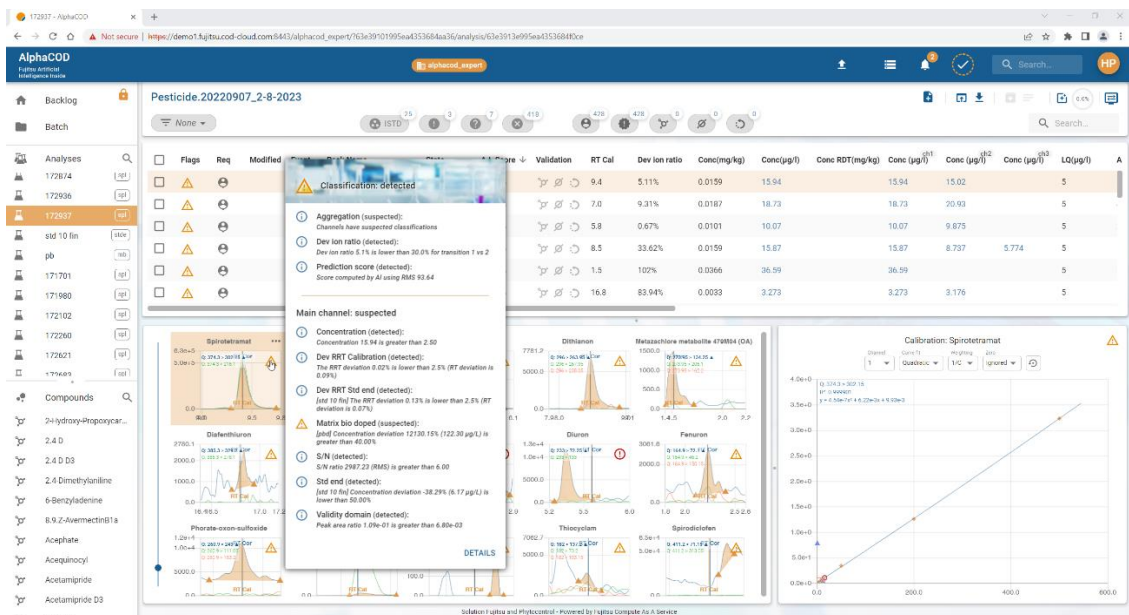
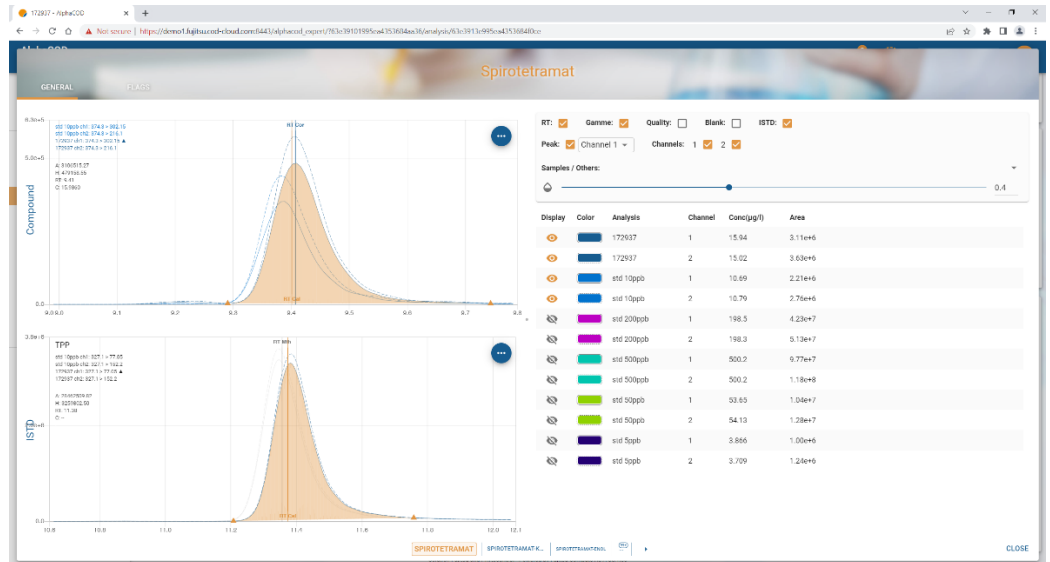
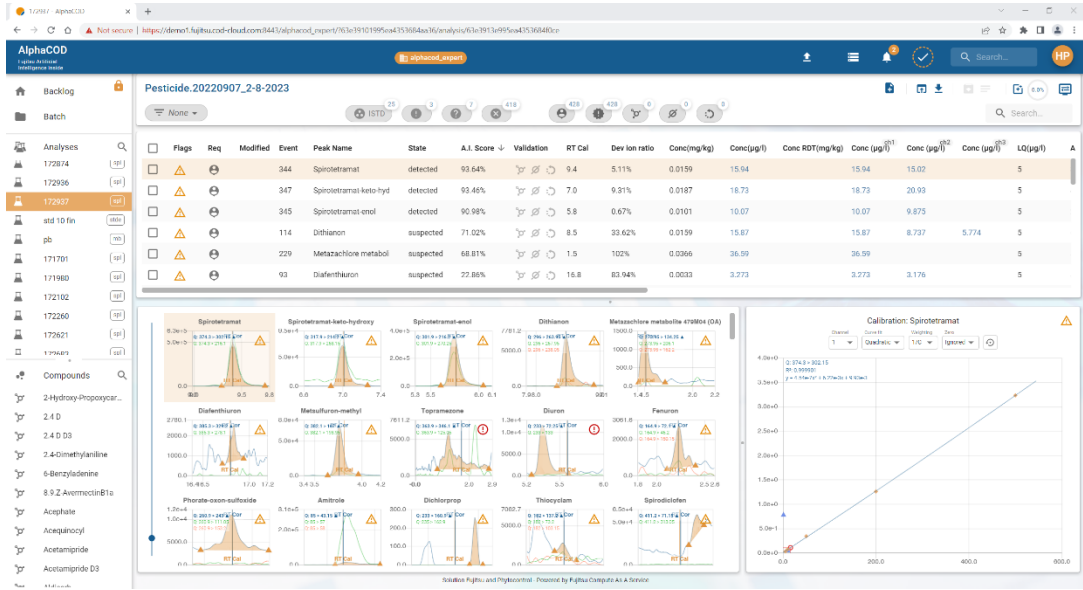
- FSP:G-SWT2660PRCOD** (Alphacod - Premium 5k Pack - 1Y)
- FSP:G-SWT2C60PRCOD** (Alphacod - Premium 10k Pack - 1Y)
- FSP:G-SWT2G60PRCOD** (Alphacod - Premium 25k Pack - 1Y)
- FSP:G-SWT3560PRCOD** (Alphacod - Premium 50k Pack - 1Y)
- FSP:G-SWT3960PRCOD** (Alphacod - Premium 100k Pack - 1Y)
- FSP:G-SWT3N60PRCOD** (Alphacod - Premium 200k Pack - 1Y)
- FSP:G-SWT3Q60PRCOD** (Alphacod - Premium 400k Pack - 1Y)

##### Platinum

- FSP:G-SWT3S60PRCOD** (Alphacod - Platinum 5k Pack - 1Y)
- FSP:G-SWT3T60PRCOD** (Alphacod - Platinum 10k Pack - 1Y)
- FSP:G-SWT3U60PRCOD** (Alphacod - Platinum 25k Pack - 1Y)
- FSP:G-SWT3V60PRCOD** (Alphacod - Platinum 50k Pack - 1Y)
- FSP:G-SWT3Y60PRCOD** (Alphacod - Platinum 100k Pack - 1Y)
- FSP:G-SWT3Z60PRCOD** (Alphacod - Platinum 200k Pack - 1Y)
- FSP:G-SWT4260PRCOD** (Alphacod - Platinum 400k Pack - 1Y)



### Solution Screenshots





## Prerequisites

**Note:** The information shows the Prerequisites at a certain point in time. These Prerequisites will be updated from time to time. The latest valid Prerequisites are online available on [online AlphaCOD Datasheet](#).

**Alphacod** solution includes a local deployment of Fujitsu COD-Drive agent to enable the automation of the data ingestion. The integration of the solution in laboratory IT requires:

- Read access to chromatograph's files.
- API access to Fujitsu AI model:  
<https://ai.fujitsu.cod-cloud.com/api>
- Write access to laboratory backup area.

When Fujitsu **Alphacod** is installed on-premises, the following minimal platform server requirements are mandatory:

- Rocky Linux (centos 8.x)
- 8+ cores
- 32+ GiB memory
- 1+ TB RAID storage

The backup, maintenance and updates of the Operating System (OS) of the on premises **Alphacod** solution are within the responsibility of the customer.

List of supported chromatograph scanners and analysis types:

### Shimadzu

- Type: Chromatography/Mass Spectrometry
- Format: \*.lcd (LabSolutions Data File)

### Bruker

- Type: Mass Spectrometry
- Format: \*.xms, \*.sqlitefiles in \*.d folders

### Waters

- Type: Chromatography/Mass Spectrometry
- Format: \*.raw folders (MassLynx Data File)

### Agilent

- Type: Chromatography/Mass Spectrometry
- Format: \*.D (ChemStation Data File)

### Jeol

- Type: Mass Spectrometry
- Format: \*.bin files in \*.JQD folders

### Thermo Fisher

- Type: Mass Spectrometry
- Format: \*.raw (Xcalibur Data File)

### Sciex

- Type: Mass Spectrometry

- Format: \*.wiff (Analyst Data File)

**Note:** the list of supported chromatograph scanners and analysis types can evolve during the life of **AlphaCOD** solution. The latest valid list is available online on [online AlphaCOD Datasheet](#).

**Alphacod** solution works **only** for chromatographs scanners and analysis types listed in the Prerequisites. Any other chromatographs or type of analysis are excluded from **Alphacod** solution.

## Data gathering and SaaS compliancy

The Data gathered as part of **Alphacod** solution will be sent to the Fujitsu **Alphacod** Cloud Platform. Please review and confirm company policies for SaaS connectivity and Data gathering: more information can be found here: [Fujitsu Cloud Data Security](#)

After the end of the contract, all **Alphacod** Cloud instances provisioned for the laboratory will be deprovisioned by Fujitsu according to: [Customer deprovisioning](#)

## Scope of Solution Location

**Alphacod** solution is **only** available remotely in the EMEA countries where local AlphaCOD T&C's have been applied! Please check the next section "Legal Information / General Terms and Conditions" to see if your country applies.

*(see also Travel Expenses on possible additional costs)*

## Legal Information / General Terms and Conditions

In addition to this datasheet, which includes a final list of the features of the services, the general business terms and conditions of the respective local Fujitsu entity for the performance of the services in its respective local version shall apply.

Please refer to: [Terms and Conditions](#)



## More information

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