# Virtual Data Scientist Platform by AutoML





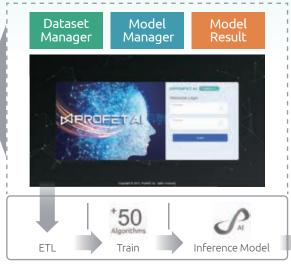
The PROFET AI is an AutoML solution gains the insight for manufacturing parameters and recipes. The flow-oriented UI/UX design makes it intuitive to input datasets, clean data, select ML algorithms and train models in 5 minutes then view the scoring and performance of the build-models, and run the model inference to verify the valued matrix for the goal of your industrial applications.

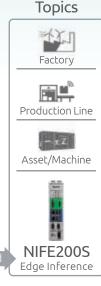
Furthermore, the PROFET AI can re-train the models, manage the product life cycle of models and even record the relation among dataset, applied algorithms and models as history to accumulate the knowhow and experiences of your business.

The PROFET AI is not just an Auto-ML solutions, but also the Virtual Data Scientist Platform to help employees to upgrade the AI & Analytics capabilities and gain the profitable insight to improve business performance at all times.

### System Architecture







The No-Coding AutoML Solution Gains the Insights for Manufacturing Parameters & Recipes

#### **Benefits**

-MFS

-SFC

- Manufacturing Parameters

#### Fast Time to Market and ROI

- Market-proven industrial ML applications (/templates) by case studies





- No-coding & limited ML knowledge required

Painless to Hands-on





- Dataset to training flow optimized UX/UI



- Multi-tasks and multi-users training system



- Prompt technical SOP transferring & after service

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#### Focus on Value

- Leading & up-to-date ML Algorithms



- Assistive charts for model scoring & performance



- Integrated Dataset and Model management systems



- Precise mode for tuning the optimized ML model

#### Reduce TCO





- Software and Hardware bundle offering



- Effective OPEX in early investment



 Upgrade the AI capabilities and productivity of employees

#### Al Functions

#### System Management

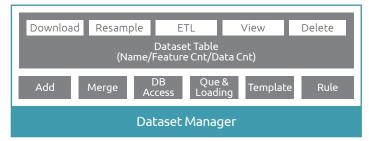
The System Management offers user setup, job status & system loading, license activation and log recording to monitor and operate the PROFET AI suite.



System Management

#### Dataset Manager

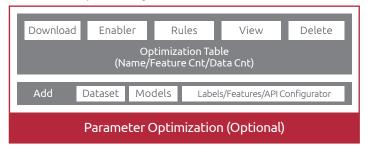
The Dataset Manager adds, operates and manages the datasets from files and database.



#### Parameter Optimization (Optional)

The Parameter Optimization allows you to combine various models and configure labels, features, weight then generate the optimized results combinations by features for the target labeling value of your applications.

- Default Optimizer API Download: 10 sets
- Default Optimizer by Excel: Unlimited



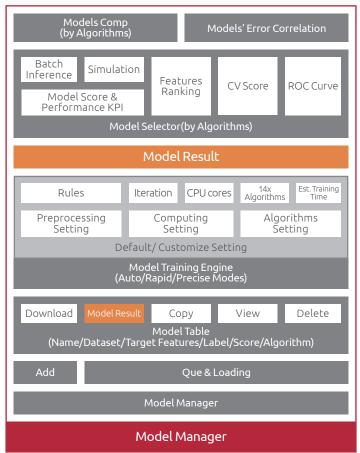
#### Model Manager

The Model Manager includes ML model training (Model Manager) and model inference (Model Result) for numerical and time-series data and applications.

The Model Manager allows you to train the ML models by Auto/Rapid/Precision Modes with no coding and low-understanding of the ML algorithms.

The Model Result allows you to run the followings.

- 1. View the score and performance KPIs of each models.
- 2. Compare the score and relationship among models.
- 3. Perform the model inference of each models for label simulation.



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### **Specifications**

		TT 300-F33	NISE 3900R	NISE 70-T03
AI Software Suite	Data Manager	- Support file format: .CSV, Excel - Support database type: MSSQL, Oracle Database, MySQL, PostgreSQL, MongoDB - Unlimited Dataset Table (Depends on Storage Size) - Assistance Chart: Correlation Heat Map, PDF/CDF Chart		
	Model Manager	<ul> <li>- Unlimited Model Table</li> <li>- Default Model for Edge Download: 10 models</li> <li>- Default Training Mode: Auto/Rapid/Precise</li> <li>- Default Algorithms: 50+ (Bagging, Decision Tree, Gradient Boosting,)</li> <li>- Assistance Chart: Models Ranking, Features Ranking Correlation Heat Map, CV Score, ROC Curve</li> <li>- Inference Interface: RESTful API</li> </ul>		
	System Management	<ul> <li>Default Users: 1 account, non-concurrent user</li> <li>Default License: 3 modules (Dataset Manager, Model Manager, System Management)</li> <li>Default License of System Management: Log Manager, Audit Log</li> <li>Optional License of System Management(concurrent user): User Manager, Role Manager,</li> <li>Permission Manager, Online User Manager, Job Manager, Project Manager, License Manager</li> <li>Option License: Parameter Optimization</li> </ul>		
	Parameter Optimization (Optional)	-Default Optimizer for Edge Download: 10 models -Default Optimizer by Excel: Unlimited		
AI Training Server	CPU	Intel® Core™ i7-8700T (2.4GHz, 6C12T, 35W)	Intel® Gen 8/9 Core™ i7/i5/ i3 socket	Intel® Core™ i7-185G7E (1.80GHz, 4C8T, 15W)
	Memory	DDR4 SO-DIMM 16GB Max.	2 x DDR4 SO-DIMM 32GB Max.	DDR4 SO-DIMM 32GB Max.
	LAN & COM Port	3 x GbE, 2 x RS232/422/485, 4 x RS232	3 x GbE, 2 x RS232/422/485, 2 x RS232	2 x GbE, 1 x GbE PHY 1 x RS232/422/485, 1 x RS232
	Power	ATX , 1224V DC	ATX, 930V DC	ATX , 1224V DC
	Dimension (mm)	269(W) x 159(D) x 136(H)	215(W) x 272(D) x 115(H)	199(W) x 150(D) x 38(H)

### **Ordering Information**

#### **PROFET AI AutoML**

- PROFET AI AutoML Lite (P/N: 6014500198X01)
   1 named account, non-concurrent user, Including System Management(Log Manager, Audit Log), Dataset Manager, Model Manager
- System Management (P/N: 6014500200X01)
   1 concurrent user license
- Parameter Optimization (P/N: 6014500199X01)
- Edge Download (P/N: 6014500204X01)
- PROFET AI AutoML Enterprise (P/N: 6014500209X01)

3 concurrent users, 30 edge licenses, With all features, including unlimited Anomaly Detection

 PROFET AI AutoML Enterprise, option (P/N: 6014500210X01)

1 concurrent user, 10 edge licenses

#### **Edge License**

PROFET AI AutoML Lite/PROFET AI AutoML Enterprise

- Edge License (P/N: 6014500211X01)
   1 model
- Edge License (P/N: 6014500212X01) 10 models

#### AI Edge Inference Platform

- NIFE 200S (P/N: 10J700200004X0)
   Intel® Atom™ processor J1900 Quad Core 2.0GHz slim fanless system
- NISE 52-A01 (P/N: 10J00005200x0) Intel® Celeron® J3455 processor fanless system

#### Al Training Server

- TT300-F33 (P/N: 10JT0030005x0) 8th generation Intel® Core™ i7-8700T fanless system with PCIe x16 and x4 expansions
- NISE 3900R (P/N: 10J00390004X0)
   8th generation Intel® Core™ i7/i5/i3 fanless system with two external 2.5"
   HDDs bracket to support RAID 0/1
- NISE 70-T03 (P/N: 10J00007002X0)
   Intel® Core™ i7-1185G7E Tiger Lake-UP3 processor fanless system