

[标题] VTEP 通过 FoE 固件升级



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Festo 技术支持
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关键词:

CODESYS，VTEP 固件升级

摘要:

本文介绍了通过 FoE 来给 VTEP 阀岛进行固件升级分具体方法。

目标群体:

本文仅针对有一定自动化设备调试基础的工程师，需要对 CODESYS 系统以及 VTEP 有一定了解。

声明:

本文档为技术工程师根据官方资料和测试结果编写，旨在指导用户快速上手使用 Festo 产品，如果发现描述与官方正式出版物冲突，请以正式出版物为准。

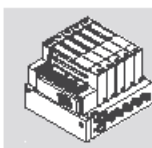
我们尽量罗列了实验室测试的软、硬件环境，但现场设备型号可能不同，软件/固件版本可能有差异，请务必在理解文档内容和确保安全的前提下执行测试。

我们会持续更正和更新文档内容，恕不另行通知。

请使用最新版本的 VTEP-5C-...-EC 操作手册
文档下载链接如下：
<https://www.festo.com.cn/cn/zh/support-portal-specific/?query=8176050&groupId=3&productName=%E9%98%80%E5%B2%9B&documentId=663798>

VTEP-5C-...-EC-CS

Proportional valve terminal



FESTO

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Operating instruction
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Translation of the original instructions

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EtherCAT is a registered trademark of its respective trademark holder in certain countries.

1 About this document

1.1 Product version

This document refers to the following product versions:

Product	Version
VTEP-...	Proportional valve terminal VTEP from revision 04
Firmware	from version 1.3.0.1
VEVP-...	Valve for proportional valve terminal VTEP from revision 01

Tab. 1: Product version

The product version can be determined from the product labelling.

Software suitable for determining the product version is available from Festo in the Support Portal → www.festo.com/sp.
Information on using the software can be found in the integrated Help function.

There may be an updated version of this document for this or later product versions → www.festo.com/sp.

1.2 Product labelling

1.2.1 Proportional valve terminal VTEP

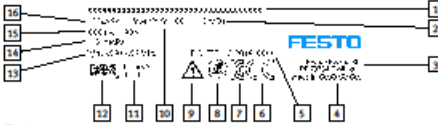


Fig. 1

1 Order reference	10 Serial number
2 Revision number	11 Product Key
3 Address specification	12 Data Matrix Code
4 Country of origin	13 Pressure range
5 Registration number KC approval	14 Operating pressure
6 CE marking,	15 Current specification/voltage specification
7 KC mark	16 Part number
8 ESD symbol	
9 Warning symbol	

Warning symbols on the product



If the housing is damaged (for example due to cracking), protection against dangerous voltage is no longer guaranteed.
- Do not start the device.
- Immediately shut down the device.



Electrostatically-sensitive devices.
- Do not touch any components.
- Observe the handling specifications for electrostatically sensitive devices.

Tab. 2: Meaning of the warning symbols

1.2.2 Valve slice VEVP



Fig. 2: Product labelling for valve slice VEVP

1 Closed default position	5 Revision number
2 Data Matrix Code	6 Part number
3 Product Key	7 Order reference
4 Serial number	

2 Safety

2.1 Safety instructions

- Only use the product in its original condition without unauthorised modifications.
- Only use the product if it is in perfect technical condition.
- Observe the identifications on the product.
- Take into account the ambient conditions at the location of use.
- Store the product in a cool, dry environment protected from UV and corrosion. Keep storage times short.
- Before working on the product, switch off the power supply and secure it against being switched on again.
- The product may generate high frequency interference, which may require interference suppression measures in residential areas.
- Have the product repaired by the Festo repair service only.
- The product is classified as "Open Type Equipment" in accordance with UL 601010. The resulting requirements when operating the product must be taken into account by the user.
- Manipulating the tuning parameters can lead to unpredictable system behaviour and is the sole responsibility of the user.

2.2 Intended use

The product is intended to control pressure in pneumatic systems and is intended for use in an industrial environment. Use the product exclusively in combination with modules and components that are certified for the specific product variant and have been tested and approved by Festo.

2.3 Training of qualified personnel

Work on the product may only be carried out by qualified personnel who can evaluate the work and detect dangers. The qualified personnel have skills and experience in dealing with electropneumatic (open-loop) control technology. The qualified personnel have knowledge and experience of using the EtherCAT network protocol. Experience with closed-loop systems is a prerequisite for configuring the tuning parameters.

3 Additional Information

- Contact the regional Festo contact if you have technical problems → www.festo.com.
- Accessories → www.festo.com/catalogue.

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通过 CoE Online 窗口，可以查看当前 VTEP 的固件版本。进行固件升级期间禁止切断设备电源！！

General

Expert Process Data

Process Data

Startup Parameters

Online

CoE Online

Diagnosis History

Log

EtherCAT I/O Mapping

EtherCAT IEC Objects

Status

Information

Read Objects

☒ Auto update

☒ Offline from ESI file

☐ Online from device

Index:Subindex	Name	Flags	Type	Value
16#1000:16#00	Device Type	RO	UDINT	0
16#1001:16#00	Error Register	RO	USINT	0
16#1008:16#00	Device Name	RO	STRING(7)	'VTEP-CS'
16#1009:16#00	Hardware Version	RO	STRING(6)	'V1.0.0'
16#100A:16#00	Software Version	RO	STRING(20)	'V1.1.0.5'
16#1018:16#00	Identity Object			
16#10F1:16#00	Error Settings			
16#10F3:16#00	Diagnosis History			
16#10F8:16#00	Timestamp Object	RW	ULINT	589347762885
16#1600:16#00	Outputs			
16#1601:16#00	Outputs			
16#1602:16#00	Outputs			
16#1A00:16#00	Inputs			
16#1A01:16#00	Inputs			
16#1A02:16#00	Inputs			
16#1C00:16#00	Sync Manager Communication Type			
16#1C12:16#00	RxPDO assign			
16#1C13:16#00	TxPDO assign			
16#1C32:16#00	SM output parameter			
16#1C33:16#00	SM input parameter			
16#2400:16#00	Setpoint Pressure Valve 0 at (2)	RW	DINT	0
16#2401:16#00	Control Word Valve 0 at (2)	RW	DINT	0
16#2402:16#00	Setpoint Pressure Valve 0 at (4)	RW	DINT	0

Messages - Total 2 error(s), 1 warning(s), 5 message(s)

EtherCAT

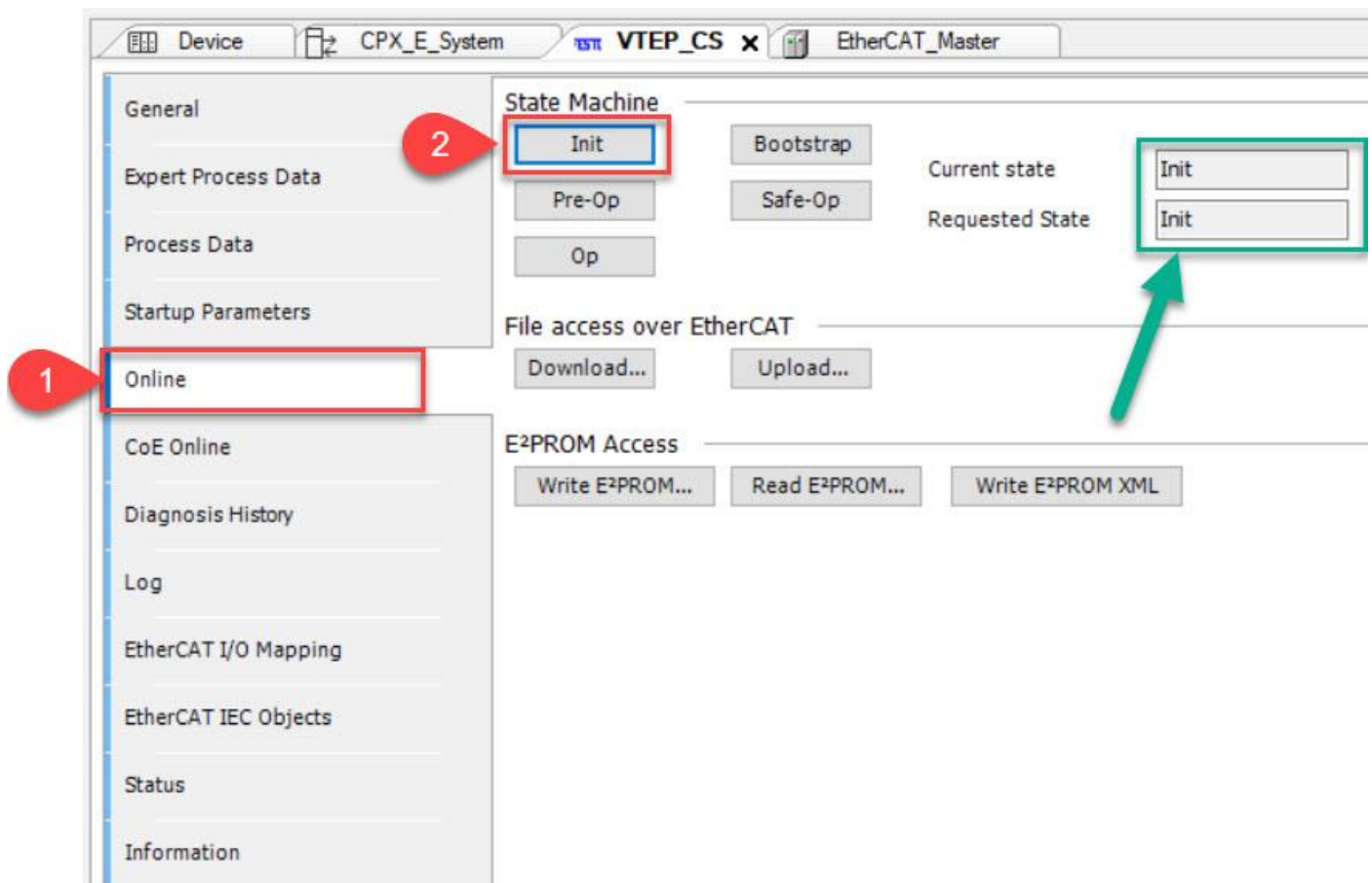
0 error(s)

1 warning(s)

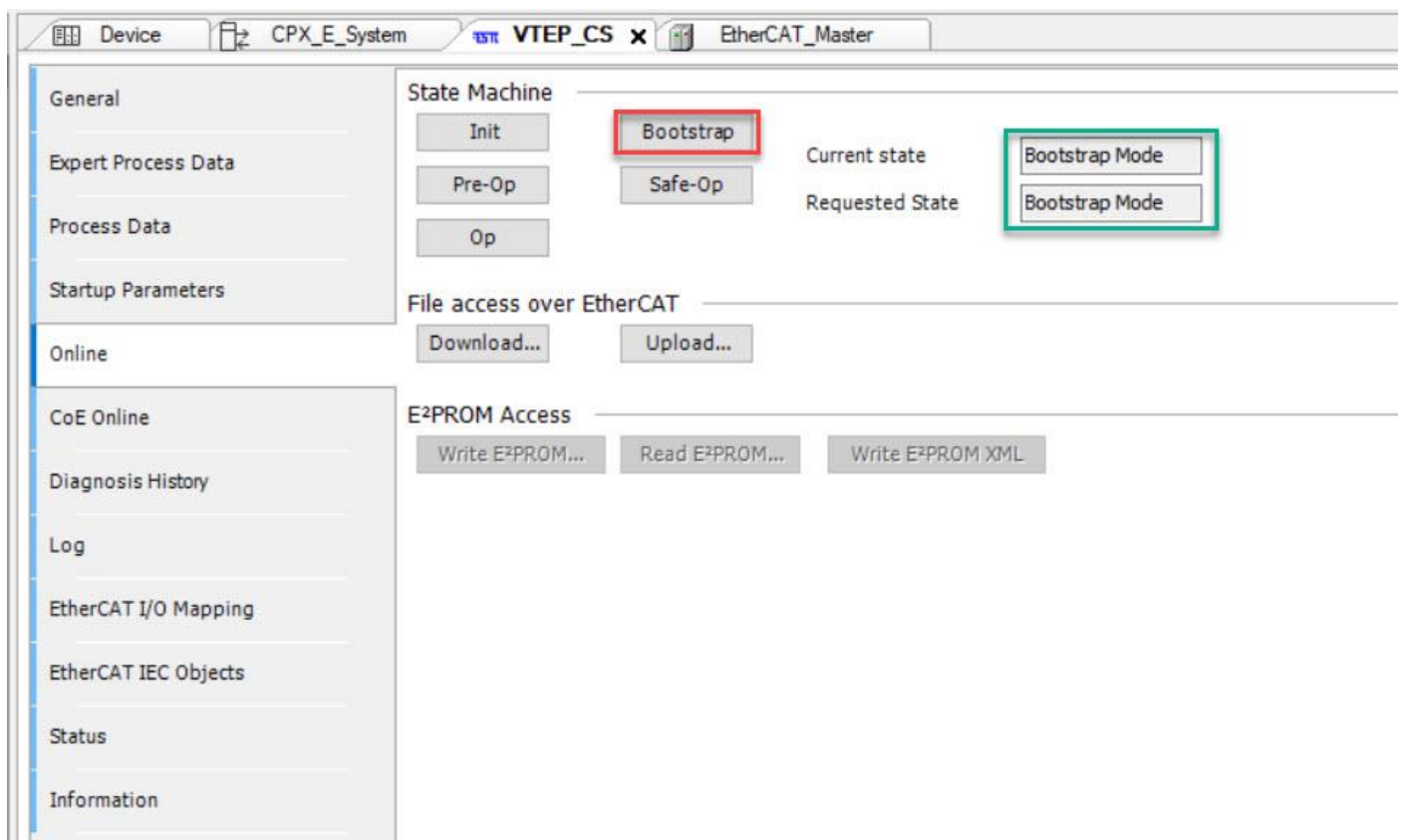
0 message(s)

Description	Project	Ob
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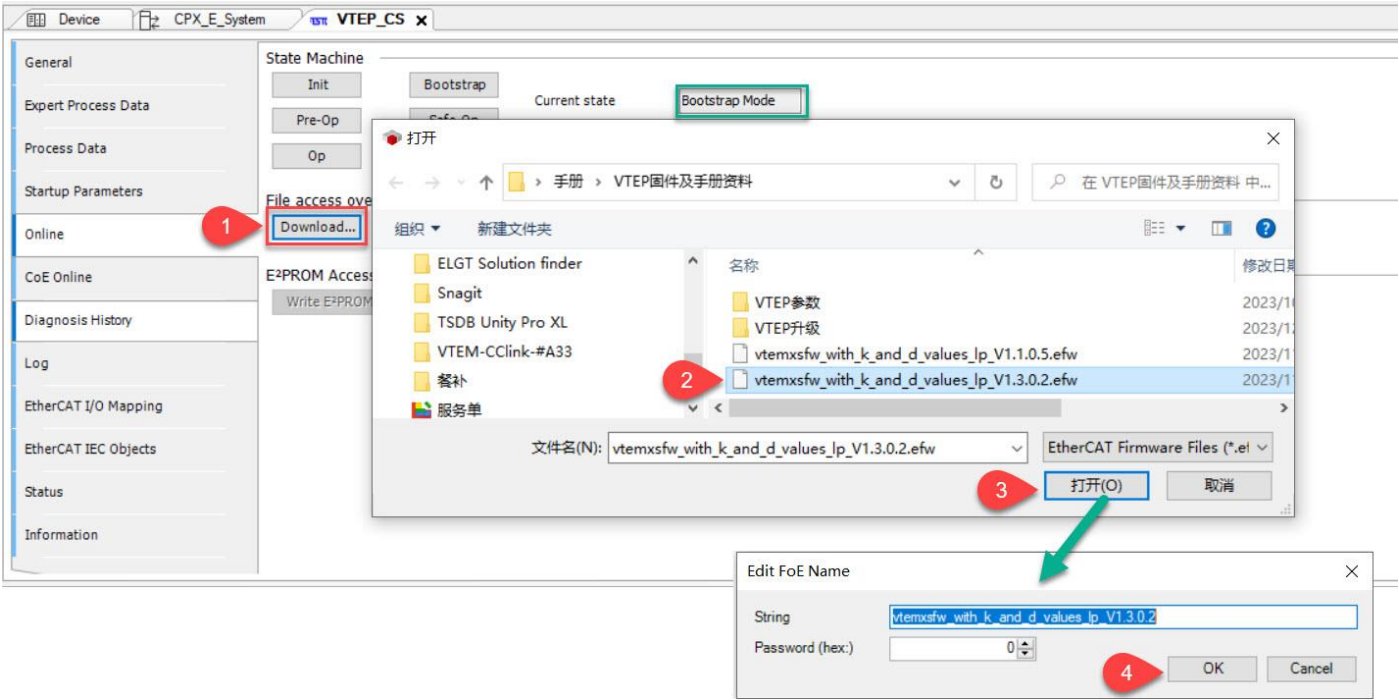
- 首先点击 Online 选项，将窗口切换至固件升级画面，之后点击 Init 按钮，将设备状态切换至 Init 状态



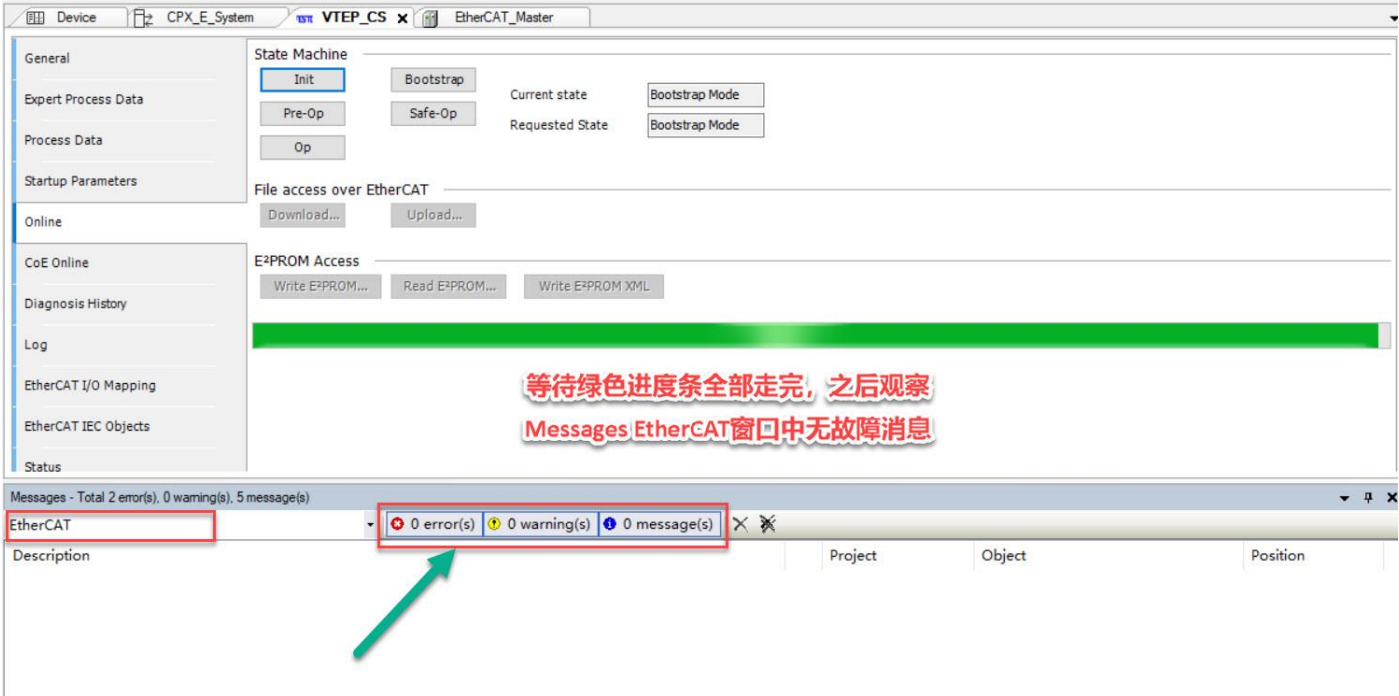
点击 Bootstrap 按钮，将设备状态切换至-启动载入模式。



点击 Download 按钮，在弹出的新窗口中选择需要升级的固件文件，之后点击打开。点击打开后会弹出“Edit FoE Name”窗口，在此窗口中点击 OK 按钮，开始进行固件更新。



等待绿色进度条全部走完，直至消失在当前画面中。然后观察消息窗口无故障信息即可。



首先通过 Online—Reset Cold，通过冷复位后，再重新启动此时设备将切换至 Operational 状态。之后可通过 CoE Online 窗口来查看此时设备的固件版本。

