



Easy! Smooth!

Replacement Guidebook

LT-3300T → STC-6300TA

The 4th Edition May 2025

SE01-Guide-LT3300TtoSTC6300TA-EN-04

*Products may be changed or discontinued without notice. Please check our website for the latest information.

Update History

| Date | Edition | Updated Slide | Description |
|------------|-----------------|------------------------------|--|
| 2023/07/18 | 1 st | - | Newly created |
| 2024/03/08 | 2 nd | 19 43, 44 49 | ATEX/IECEX is supported. Pro-Server EX is supported. One slide is added. "In case of connecting 3 units of TM3 / EX modules with STC6000 Series" |
| 2024/08/23 | 3 rd | 45 | Added information of the workarounds for Blink function on STC6000 Series |
| 2025/5/23 | 4 th | 12 10, 13, 20 19 42 | Correction: Backup memory type corrected from NVRAM to FLASH EPROM Updated the info about CANopen: CANopen communication is not supported by STC6000 Updated the supported standards page: certified by EU RO MR (Marine certification) and CCC-Ex Newly supported feature: XY Graph (with GP-Pro EX Ver.5.00.000 or later) |

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Safety Information

Important Information


Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.




The addition of this symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.




This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

 **DANGER**

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

 **CAUTION**

CAUTION indicates a hazardous situation which, if not avoided, **could result** in minor or moderate injury.

 **WARNING**

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Please Note

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.
A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation and has received safety training to recognize and avoid the hazards involved.

About this book

Document Scope

This guidebook introduces the procedures to replace a unit from “LT3000 Series” to “STC6000 Series”.
The recommended substitute models are as follows.

| Model in use | | | Recommended substitutes | |
|-------------------------|------------------------------------|---|---------------------------|------------------|
| LT-3300T(5.7”) (Sink) | PFXLT3300TADK (LT3300-T1-D24-K) | → | STC-6300TA(5.7”) (Sink) | PFXSTC6300TADDKE |
| LT-3300T(5.7”) (Source) | PFXLT3300TADC (LT3300-T1-D24-C) | → | STC-6300TA(5.7”) (Source) | PFXSTC6300TADDCE |

Validity Note

This documentation is valid for this product.

The technical characteristics of the device(s) described in the present manual also appear online at www.pro-face.com.

The characteristics that are described in the present document should be the same as those characteristics that appear online. In line with our policy of constant improvement, we may revise content over time to improve clarity and accuracy. If you see a difference between the document and online information, use the online information as your reference.

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Related Documents

You can download the manuals related to this product, such as the software manual, from our website.

<https://www.proface.com/en/download/search>

Product Related Information

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

About this book

⚠️⚠️ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Remove all power from the device before removing any covers or elements of the system, and prior to installing or removing any accessories, hardware, or cables.
- Unplug the power cable from both this product and the power supply prior to installing or removing the product.
- Always use a properly rated voltage sensing device to confirm power is off where and when indicated.
- Replace and secure all covers or elements of the system before applying power to this product.
- Use only the specified voltage when operating this product. This product is designed to use 24 Vdc. Always check whether your device is DC powered before applying power.
- When using this product in Class I, Division 2, Groups A, B, C, and D hazardous locations, install this product in an enclosure that prevents the operator from touching the back of this product without the use of tools.

Failure to follow these instructions will result in death or serious injury.

Critical alarm indicators and system functions require independent and redundant protection hardware and/or mechanical interlocks.

When you cycle power, wait at least 10 seconds after it has been turned off. If this product is restarted too quickly, it may not operate correctly.

In the event the screen cannot be properly read, for example, if the backlight is not functioning, it may be difficult or impossible to identify a function. Functions that may present a hazard if not immediately executed, such as a fuel shut-off, must be provided independently of this product. The machine's control system design must take into account the possibility of the backlight no longer functioning and the operator being unable to control the machine or making mistakes in the control of the machine.

⚠️ WARNING

LOSS OF CONTROL

- The designer of any control scheme must consider the potential failure modes of control paths and, for certain critical control functions, provide a means to achieve a safe state during and after a path failure. Examples of critical control functions are emergency stop and overtravel stop, power outage and restart.
- Separate or redundant control paths must be provided for critical control functions.
- System control paths may include communication links. Consideration must be given to the implications of unanticipated transmission delays or failures of the link.
- Observe all accident prevention regulations and local safety guidelines.
- Each implementation of this product must be individually and thoroughly tested for proper operation before being placed into service.
- The machine control system design must take into account the possibility of the backlight no longer functioning and the operator being unable to control the machine, or making errors in the control of the machine.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

For additional information, refer to NEMA ICS 1.1 (latest edition), "Safety Guidelines for the Application, Installation, and Maintenance of Solid State Control" and to NEMA ICS 7.1 (latest edition), "Safety Standards for Construction and Guide for Selection, Installation and Operation of Adjustable-Speed Drive Systems" or their equivalent governing your particular location.

⚠️ WARNING

UNINTENDED EQUIPMENT OPERATION

- The application of this product requires expertise in the design and programming of control systems. Only persons with such expertise should be allowed to program, install, alter, and apply this product.
- Follow all applicable safety standard, local regulations and directives.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

About this book

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

- Do not use this product as the only means of control for critical system functions such as motor start/stop or power control.
- Do not use this equipment as the only notification device for critical alarms, such as device overheating or overcurrent.
- Use only the software provided with this product. If you use other software, please confirm the operation and safety before use.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

The following characteristics are specific to the LCD panel and are considered normal behavior:

- LCD screen may show unevenness in the brightness of certain images or may appear different when seen from outside the specified viewing angle. Extended shadows, or crosstalk may also appear on the sides of screen images.
- LCD screen pixels may contain black and white colored spots and color display may seem to have changed.
- When experiencing vibrations within a certain frequency range and vibration acceleration is above what is acceptable, the LCD screen may partially turn white. Once the vibration condition ends, the whitening of the screen is resolved.
- When the same image is displayed on the screen for a long period, an afterimage may appear when the image is changed.
- The panel brightness may decrease when used for a long time in an environment continuously filled with inert gas. To prevent deterioration of panel brightness, regularly ventilate the panel. For more information, please contact customer support.

<https://www.pro-face.com/trans/en/manual/1015.html>

⚠ WARNING

SERIOUS EYE AND SKIN INJURY

The liquid in the LCD panel contains an irritant:

- Avoid direct skin contact with the liquid.
- Wear gloves when you handle a broken or leaking unit.
- Do not use sharp objects or tools in the vicinity of the LCD panel.
- Handle the LCD panel carefully to prevent puncture, bursting, or cracking of the panel material.
- If the panel is damaged and any liquid comes in contact with your skin, immediately rinse the area with running water for at least 15 minutes. If the liquid gets in your eyes, immediately rinse your eyes with running water for at least 15 minutes and consult a doctor.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

NOTICE

REDUCTION OF SERVICE LIFE OF PANEL

Change the screen image periodically and try not to display the same image for a long period of time.

Failure to follow these instructions can result in equipment damage.

Cybersecurity

Cybersecurity Guideline

Use this product inside a secure industrial automation and control system. Total protection of components (equipment/devices), systems, organizations, and networks from cyber attack threats requires multi-layered cyber risk mitigation measures, early detection of incidents, and appropriate response and recovery plans when incidents occur. For more information about cybersecurity, refer to the Pro-face HMI/IPC Cybersecurity Guide.

https://www.proface.com/en/download/manual/cybersecurity_guide

⚠ WARNING

POTENTIAL COMPROMISE OF SYSTEM AVAILABILITY, INTEGRITY, AND CONFIDENTIALITY

- Change default passwords at first use to help prevent unauthorized access to device settings, controls and information.
- Disable unused ports/services and default accounts, where possible, to minimize pathways for malicious attacks.
- Place networked devices behind multiple layers of cyber defenses (such as firewalls, network segmentation, and network intrusion detection and protection).
- Apply the latest updates and hotfixes to your Operating System and software.
- Use cybersecurity best practices (for example: least privilege, separation of duties) to help prevent unauthorized exposure, loss, modification of data and logs, interruption of services, or unintended operation.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

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1. Summary

On replacement from LT-3300T to STC-6300TA, the following points are the main points to note.

- STC-6300TA supports DIO and EX Modules as the same as LT-3300T. The I/O Driver settings on the software are also the same as LT-3300T, so the settings made in LT-3300T project will remain unchanged after converting the project to STC-6300TA.
- The DIO interface specifications of STC-6300TA are the same as LT-3300T. You can use the DIO connector and cable wiring as they are.
- 3 units of EX Modules can be connected directly on LT-3300T, while 2 units directly on STC-6300TA. To use 3 units of EX Modules with STC-6300TA, option modules are needed. For details, please refer to [2-3. Hardware Compatibility – TM3/EX Module Connection](#).
- On STC-6300TA, CANopen communication is not available. If you need CANopen, replace to CANopen-compatible models.
- Display resolution: STC-6300TA has a better resolution. You need to convert resolution by the software to use old project data from LT-3300T.

LT-3300T(5.7")

320 x 240 pixels (QVGA)

STC-6300TA(5.7")

640 x 480 pixels (VGA)

- External dimensions: The panel cut dimensions are the same, but the external dimensions are slightly different. It is necessary to check the dimensions of the HMI installation location.

LT-3300T(5.7")

W167.5 x H135 x D77.6 mm

STC-6300TA(5.7")

W169.5 x H137 x D60 mm



LT-3300T



STC-6300TA

2. Hardware Section

2-1. LT-3300T vs STC-6300TA Specification Comparison -1. Basic Information-

| | | LT-3300T | STC-6300TA | Points to note when replacing |
|--------------------------------|-----------------------------|---|---|---|
| Display Type | | TFT Color LCD | TFT Color LCD | |
| Display Size | | 5.7" | 5.7" | |
| Resolution | | 320 x 240 pixels (QVGA) | 640 x 480 pixels (VGA) | Need to change resolution setting by Software |
| Effective display area (W x H) | | 70.56 x 52.92 mm | 115.2 x 86.4 mm | |
| Display colors | | 65,536 colors (no blink) / 16,384 colors (with blink) | 262,144 colors (no blink) | No blink function |
| Backlight | | White LED (not user replaceable) | White LED (not replaceable) | Backlight is not replaceable. |
| Backlight service life | | 50,000 hours or more (before backlight brightness decreases to 50%) | 50,000 hours or more (before backlight brightness decreases to 25%) | |
| Brightness control | | 8 levels (Adjusted with touch panel or software) | 16 levels (Adjusted with touch panel or software) | |
| Touch panel type | | Resistive film (analog, single touch) | Resistive film (analog, single touch) | |
| Touch panel resolution | | 1,024 x 1,024 | 1,024 x 1,024 | |
| Touch panel service life | | 1 million times or more | 1 million times or more | |
| Application memory | Screen area | FLASH EPROM 6MB | FLASH EPROM 64MB | |
| | Logic Program | FLASH EPROM 132KB (15,000 steps) | FLASH EPROM 132KB (15,000 steps) | |
| Backup memory | Screen area | SRAM 128KB | FLASH EPROM 320KB | |
| | Variable area | SRAM 64KB | FLASH EPROM 64KB | |
| | Battery (clock data backup) | Rechargeable battery / Secondary battery for clock data backup | Replaceable battery / Primary battery for clock data backup | Battery can be replaced by user. |
| Rate Input Voltage | | DC24V (Input voltage limits: DC19.2~28.8V) | DC24V (Input voltage limits: DC19.2~28.8V) | |
| IP Rating | | IP65f, NEMA#250 TYPE 4X/13 | IP65f, UL 50/50E, TYPE 1/4X/12/13 | |
| External Dimensions | | W167.5 x H135 x D77.6 mm | W169.5 x H137 x D60 mm | The dimensions are different. |
| Panel Cut Dimensions | | W156 x H123.5 mm | W156 x H123.5 mm | |
| Power Consumption | | 18W or less | 11.3W or less | |

2-1. LT-3300T vs STC-6300TA Specification Comparison -2. Interface-

| | | LT-3300T | STC-6300TA | Points to note when replacing |
|--|--|---|---|--|
| Serial I/F | COM1 | RS-232C/422/485 (D-Sub 9pin Plug) | RS-232C/422/485 (D-Sub 9pin Plug) | Please check the manual for the communication cable. |
| | COM2 | - | - | |
| Ethernet I/F | | 10BASE-T/100BASE-TX (RJ-45) x1 | 10BASE-T/100BASE-TX (RJ-45) x1 | |
| USB I/F | Type A | USB 1.1 (Type A) x1 -USB transfer cable (CA3-USBCB-01) | USB 2.0 (Type A) x1 | No screen data transfer via Type A |
| | Micro B | - | USB 2.0 (micro-B) x1 -USB transfer cable(PFXZUSCBMB2) or commercial USB micro-B transfer cable | |
| CF Card I/F | | - | - | |
| CANopen I/F LT-3300T: AUX/Expansion Unit (EXT2) | | CANopen Master with CAN Master unit (P/N: CA8-CANLT-01) | - CANopen communication is not supported. | |
| Expansion Module I/F LT-3300T: EX Module (EXT1) | | EX module / TM3 module Up to 3x modules by Direct mounting | TM3 module / EX module Up to 2x modules by Direct mounting 3x modules by Extension mounting *1 | TM3 Transmitter / Receiver modules are needed when connecting 3x modules *1 |
| DIO I/F | Digital IN/OUT | DIO 32 points (16x IN / 16x OUT) Sink/Source input: 16 points PFXLT3300TADK (Sink output): 16 points PFXLT3300TADC (Source output): 16 points Connector: 38 pin | DIO 32 points (16x IN / 16x OUT) Sink/Source input: 16 points PFXSTC6300TADDKE (Sink output): 16 points PFXSTC6300TADDCE (source output): 16 points Connector: 38 pin | |
| | HSC (high speed counter) Max.100kHz | 4x Fast IN (among 16 IN) | 4x Fast IN (among 16 IN) | |
| | PTO (pulse train output) Max. 65kHz | 4x Fast OUT (among 16 OUT) | 4x Fast OUT (among 16 OUT) | |

***1:** For Extension mounting, TM3 Transmitter (TM3XTRA1) and Receiver (TM3XREC1) modules are needed.

NOTE: For more details about specification, please refer to [STC6000 Hardware Manual](#).

2-1. LT-3300T vs STC-6300TA Specification Comparison -2. Interface-

Digital Input Specifications

| | | LT-3300T | STC-6300TA |
|---------------------------|---|--|----------------------|
| Input Terminal | | IN0...IN15 | |
| Rated Voltage | | DC24V | |
| Maximum Allowable Voltage | | DC28.8V | |
| Input Type | | Sink/Source Input | |
| Rated Current | | 6.5mA (DC24V) (IN0, IN2, IN4, IN6), 4.1mA (DC24V) (Other input) | 2.25mA |
| Input Resistance | | Approx. 3.7kΩ (IN0, IN2, IN4, IN6), Approx. 5.9kΩ (Other input) | 10.7kΩ |
| Input Points | | 16 | |
| Common Lines | | 1 | |
| Common Design | | 16 points/1 common line | |
| Operation Range | ON voltage | DC19V or more | DC15-28.8V |
| | OFF voltage | DC5V or less | |
| | ON current | 6.5mA (DC24V) (IN0, IN2, IN4, IN6) 4.1mA (DC24V) (Other input) | 2.25 mA |
| | OFF current | N/A | 1.0 mA or less |
| Filtering | Normal input | 0.5 ms x N (N is 0 to 40) | |
| | High-speed counter (IN0, IN2, IN4, IN6) | N/A | None, 4 μs, or 40 μs |
| Input Delay Time | OFF to ON | 0.5 to 20ms *1 | |
| | ON to OFF | 0.5 to 20ms *1 | |

*1 Digital filter can be set at intervals of 0.5 ms.

| | | LT-3300T | STC-6300TA |
|-----------------------|---|---|-----------------------|
| Input Signal Display | | No LED indicators | |
| Status Display | | None | |
| Isolation | | Photocoupler Isolation | Digital Isolations |
| External Connection | | 38-pin connector (used with Output section) | |
| External Power Supply | | For Signal: DC 24V | |
| Cable length | Normal input | N/A | Maximum 50 m (164 ft) |
| | High-speed counter/Pulse catch input (IN0, IN2, IN4, IN6) | N/A | Maximum 10 m (33 ft) |

2-1. LT-3300T vs STC-6300TA Specification Comparison -2. Interface-

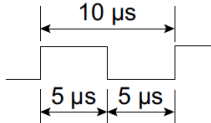
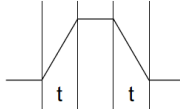
Digital Output Specifications

| | | LT-3300T | | STC-6300TA | |
|----------------------------|---|--|------------------------------------|--|------------------------------------|
| Output Terminal | | OUT0 to OUT3 | OUT4 to OUT15 | OUT0 to OUT3 | OUT4 to OUT15 |
| Rated Voltage | | DC24V | | | |
| Rated Voltage Range | | DC20.4V to DC28.8V | | | |
| Output Type | | LT3300-T1-D24-K: Sink LT3300-T1-D24-C: Source | | PFXSTC6300TADDKE: Sink PFXSTC6300TADDCE: Source | |
| Maximum Load Current | | 0.2A/point, 1.6A/common | | 0.3 A/1-point, 3.2 A/1 common | |
| Minimum Load Current | | 1mA | 1mA (Pulse/PWM output unavailable) | 1mA | 1mA (Pulse/PWM output unavailable) |
| Output Voltage Drop | | DC 0.5V or less | | DC 1.5V or less | |
| Output Delay Time | OFF to ON (with output at DC24V, 200mA) | 5μs or less | 0.5ms or less | 5μs or less | 50 μs or less |
| | ON to OFF (with output at DC24V, 200mA) | 5μs or less | 0.5ms or less | 5μs or less | 50 μs or less |
| Voltage Leakage (when OFF) | | 0.1mA or less | | | |
| Clamp Voltage | | 39V ± 1V | | N/A | |
| Type of Output | | Transistor Output | | | |
| Common Lines | | 2 | | | |
| Common Design | | 8 points/1 common line x 2 | | | |
| External Connection | | 38-pin connector (also used for Input) | | | |
| Output Protection Type | | Output is unprotected | | | |

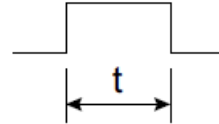
| | | LT-3300T | STC-6300TA |
|-----------------------|------------------|--|---|
| Internal Fuse | | 3.5A, 125V Chip fuse x 2 (not replaceable) | Don't have fuse inside (Chip have over current protection function) |
| Surge Control Circuit | | Zener diode | TVS (Transient Voltage Suppressors) |
| Output Points | | 16 | |
| Output Signal Display | | No LED indicators | |
| Status Display | | None | |
| Isolation Method | | Photocoupler isolation | Digital Isolations |
| External Power Supply | | For Signal: DC24V | |
| Cable Length | Normal output | N/A | Maximum 150 m (492 ft) |
| | Pulse/PWM output | N/A | Maximum 5 m (16 ft) |

2-1. LT-3300T vs STC-6300TA Specification Comparison -2. Interface-

High-Speed Counter

| | LT-3300T / STC-6300TA | |
|--------------------------------------|---|--|
| Input | DC24V Open Collector | |
| | Single Phase (4 points) | 2 Phase (1 or 2 points) |
| Input Points | CT0 (IN0) CT1 (IN2) CT2 (IN4) CT3 (IN6) | CT0 (IN0), CT1 (IN2) (used as pair) CT0: A Phase, CT1: B Phase CT2 (IN4), CT3 (IN6) (used as pair) CT2: A Phase, CT3: B Phase |
| Minimum Pulse Width (Pulse Input) |  | |
| Count Speed (Rise, Fall time) |  <p>$t = 1 \mu\text{s}$ or less (100 kpps)</p> | |
| Phase | 1 Phase | 90 degree phase differential 2-phase signal 1 phase + directional signal |
| High Speed Count Frequency | 100Kpps | 50Kpps |
| Count Edge Designation | Available | Not available |
| Count Register | 32 Bit UP/DOWN Counter | |
| Count Mode Change | Set through software | |
| Upper/Lower Limit Change | Not Available | |
| Preload – Prestrobe | Available | |
| Marker Input (Counter Value Clear) | None | IN3, IN7 |

Pulse Catch Input

| | LT-3300T / STC-6300TA |
|--------------------------------------|--|
| Input | DC24V Open Collector |
| Input Points | IN0, IN2, IN4, IN6 |
| Minimum Pulse Width (Pulse Input) | <p>Input signal ON width</p>  <p>$t = 5 \mu\text{s}$ or more</p> |

NOTE: DIO standard input/output can be used as a high-speed counter, or a pulse catch input. The setup is done by the GP-Pro EX.

2-1. LT-3300T vs STC-6300TA Specification Comparison -2. Interface-

Pulse Output

| | LT-3300T | STC-6300TA |
|---|---|---------------|
| Output Points | 4 points | |
| Output Method | PLS0 to PLS3 (OUT0 to OUT3) set with software | |
| Load Voltage | DV24V | |
| Maximum Load Current | N/A | 50 mA/1-point |
| Minimum Load Current | 1mA | |
| Maximum Output Frequency | Up to 65kHz / 1-point (set with software) | |
| Pulse acceleration/ Deceleration speed | Available | |
| ON Duty | 50% \pm 10% (at 65 kHz)*1 | |

*1: ON Duty error (10%) will be reduced if the Output frequency is low.

PWM Output

| | LT-3300T | STC-6300TA |
|--------------------------|---|---------------|
| Output Points | 4 points | |
| Output Method | PWM0 to PWM3 (OUT0 to OUT3) set with software | |
| Load Voltage | DV24V | |
| Maximum Load Current | N/A | 50 mA/1-point |
| Minimum Load Current | 1mA | |
| Maximum Output Frequency | Up to 65kHz / 1-point (set with software) | |
| ON Duty | 19 to 81% (at 65kHz)*2 | |

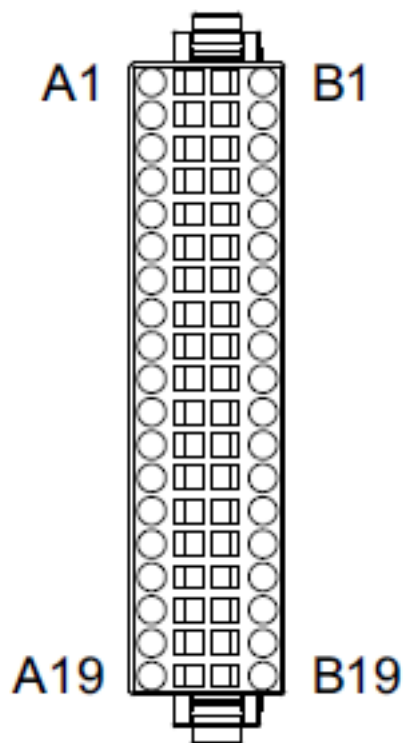
*2: ON Duty (effective range) will be widened if the output frequency is low.

Note: DIO standard output can be used as a pulse or PWM output. For setup information, refer to [GP-Pro EX V4.0 Reference Manual](#).

2-1. LT-3300T vs STC-6300TA Specification Comparison -2. Interface-

DIO Interface

38 pin connector
(P/N: PFXZC7CNXY321*)



STC-6300TA connector pin definition (Same as LT-3300T)

| Pin No. | Signal name | Pin No. | Signal name |
|---------|-----------------------------|---------|----------------------------------|
| A1 | IN1 | B1 | IN0 (CT0)*1 |
| A2 | IN3 | B2 | IN2 (CT1)*1 |
| A3 | IN5 | B3 | IN4 (CT2)*1 |
| A4 | IN7 | B4 | IN6 (CT3)*1 |
| A5 | IN9 | B5 | IN8 |
| A6 | IN11 | B6 | IN10 |
| A7 | IN13 | B7 | IN12 |
| A8 | IN15 | B8 | IN14 |
| A9 | NC | B9 | COM |
| A10 | Sink: NC Source: +24 Vdc | B10 | Sink: +24 Vdc Source: +24 Vdc |
| A11 | Sink: 0 Vdc Source: NC | B11 | Sink: 0 Vdc Source: 0 Vdc |
| A12 | OUT1 (PLS1, PWM1)*2 | B12 | OUT0 (PLS0, PWM0)*2 |
| A13 | OUT3 (PLS3, PWM3)*2 | B13 | OUT2 (PLS2, PWM2)*2 |
| A14 | OUT5 | B14 | OUT4 |
| A15 | OUT7 | B15 | OUT6 |
| A16 | OUT9 | B16 | OUT8 |
| A17 | OUT11 | B17 | OUT10 |
| A18 | OUT13 | B18 | OUT12 |
| A19 | OUT15 | B19 | OUT14 |

*1 Signal names in parentheses () indicate the counter input used.

*2 Signal names in parentheses () indicate the pulse output or PWM output used.

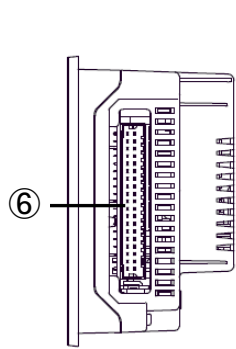
* The same DIO connector PFXZC7CNXY321 (old P/N: CA7-DIOCN5-01) can be used for both LT-3300T and STC-6300TA.

2-2. Standards Compatibility

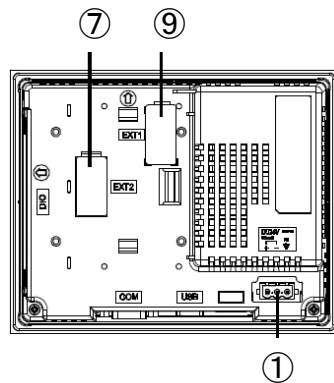
| Certification | LT-3300T | STC-6300TA |
|---|--|--|
| CE (EN61000-6-4, EN61000-6-2, EN61131-2) | ✓ | ✓ |
| UKCA | - | ✓ |
| UL/cUL | ✓ (UL508) (CSA C22.2 No.142) | ✓ (UL61010-2-201) (CSA C22.2 No.61010-2-201) |
| UL/cUL Class 1, Div. 2 | ✓ (ANSI/ISA12.12.01) (CSA C22.2 No213) | ✓ (UL121201) (CSA C22.2 No213) |
| ATEX (Zones 2/22, equipment category 3 Gas Dust) | - | ✓ |
| IECEx (Zones 2/22, equipment category 3 Gas Dust) | - | ✓ |
| UKEX | - | ✓ |
| KCs | - | - |
| NEPSI → CCC-Ex | - | ✓ |
| RCM (C-Tick) | - | ✓ |
| EAC (GOST-R) | ✓ | ✓ |
| RoHS for EU | ✓ | ✓ |
| RoHS for China | ✓ | ✓ |
| REACH | ✓ | ✓ |
| CCC *apply for CCC exemption | - | - |
| KC | ✓ | ✓ |
| Marine | - | EU RO MR *1 |
| WEEE | ✓ | ✓ |

*1: For information about EU RO MR, refer to our [Pro-face website](#).

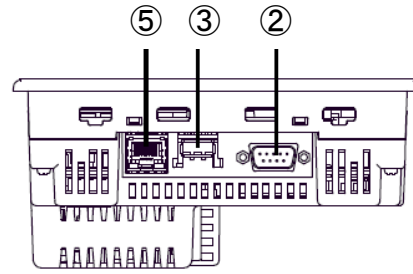
2-3. Hardware Compatibility – Interfaces



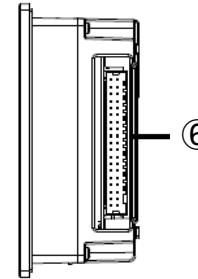
LT-3300T Right



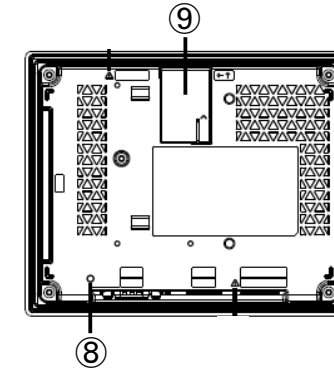
LT-3300T Rear



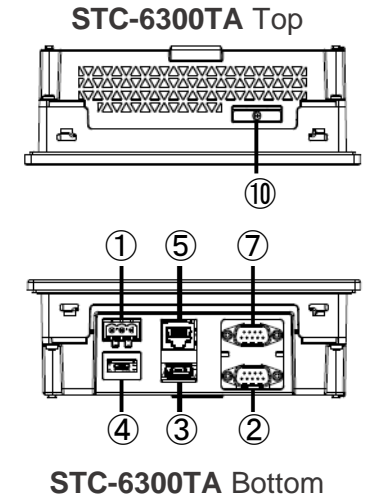
LT-3300T Bottom



STC-6300TA Right



STC-6300TA Rear



STC-6300TA Bottom

| | LT-3300T | STC-6300TA |
|---|---|----------------------------|
| ① | Power Connector (DC) | Power Connector (DC) |
| ② | Serial Interface (COM1) | Serial Interface (COM1) |
| ③ | USB (Type A) Interface | USB (Type A) Interface |
| ④ | - | USB (micro-B) Interface |
| ⑤ | Ethernet Interface | Ethernet Interface |
| ⑥ | DIO Interface | DIO Interface |
| ⑦ | AUX Unit Interface / Expansion Unit (EXT2) *1 | CANopen Interface *2 |
| ⑧ | - | CANopen LED *2 |
| ⑨ | EX Module Interface (EXT1) *1 | Expansion Module Interface |
| ⑩ | - | Battery Slot |

*1: EX module and CANopen Master Unit cannot be used at the same time.

*2: CANopen communication is not available.

NOTE: Please check [STC6000 Series Hardware Manual](#) for details such as interface specifications and pin assignments.

2-3. Hardware Compatibility – External Dimensions

| LT-3300T | STC-6300TA | Differences from LT-3300T to STC-6300TA |
|--------------------------|------------------------|---|
| W167.5 x H135 x D77.6 mm | W169.5 x H137 x D60 mm | W: +2.0mm , H: +2.0mm , D: -17.6mm |

| LT-3300T | STC-6300TA |
|--|--|
| <p>Left Side</p> <p>Top 130[5.12] 155.5[6.12]</p> <p>Front 167.5[6.59] 135[5.31]</p> <p>Right Side 77.6[3.06] 5[0.20] 123[4.84] 134.6[5.30] 144.6[5.69]</p> <p>Bottom 100[3.94]</p> | <p>Top View mm in 127 5.0 143 5.62 (C)</p> <p>(A) Front View 169.5 6.67 137 5.39</p> <p>(B) Side View 145 5.7 133 5.24 60 2.36 6.8 0.27</p> |

2-3. Hardware Compatibility – Installation Method

Panel cut dimensions and installation method are the same between LT-3300T and STC-6300TA.

LT-3300T

The product can be installed easily by using a screwdriver.

Top Side

Slots

Bottom Side

<LT-3300 Series>

■ Panel Cut Dimensions

Unit: mm[in.]

156.0⁺¹₋₀ [6.14^{+0.04}₋₀]

4-R3[0.12] or less

123.5⁺¹₋₀ [4.86^{+0.04}₋₀]

Panel thickness area
1.6[0.06] to 5.0[0.20]

STC-6300TA

The product can be installed easily by using a screwdriver.

Insertion slots

Bottom Side

<STC-6300 Series>

mm (in)

A B C

r≤3 (0.12)

Model name


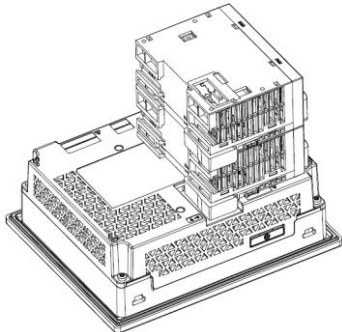
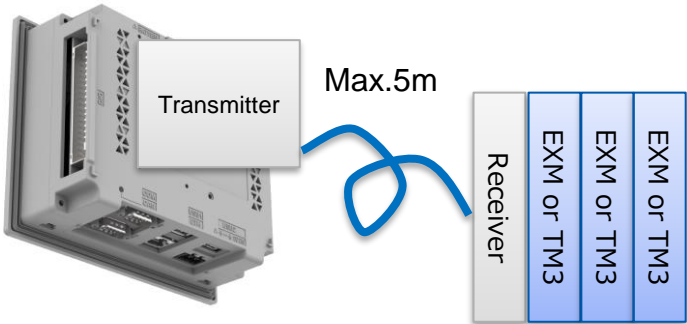
| A | B | C |
|--|--|-------------------------------|
| 156 mm (+1/-0 mm) (6.14 in [+0.04/-0 in]) | 123.5 mm (+1/-0 mm) (4.86 in [+0.04/-0 in]) | 1.6...5 mm (0.06...0.2 in) |

NOTE: Installation fastener of LT-3300T (P/N: CA3-ATFALL-01) cannot be used for STC-6300TA. For STC-6300TA, please use the fastener of STC6000 Series (P/N: PFXZC3AT1).

NOTE: Please check [STC6000 Hardware Manual](#) for installation requirements and procedure.

2-3. Hardware Compatibility – TM3/EX Module Connection

EXM = EX module

| | LT-3300T | STC-6300TA |
|------------------------|---|---|
| Rear (Direct) Mounting | <p>Support up to 3 units of TM3 / EX modules</p>  | <p>Support up to 2 units of TM3 / EX modules</p>  |
| Extension Mounting | | <p>Able to connect 3 units of TM3 / EX modules with the following options:</p> <ul style="list-style-type: none"> - TM3 Transmitter (P/N: TM3XTRA1) - TM3 Receiver (P/N: TM3XREC1) - Connection cable between transmitter and receiver  <p>Max.5m</p> <p>Transmitter</p> <p>Receiver</p> <p>EXM or TM3</p> <p>EXM or TM3</p> <p>EXM or TM3</p> <p>1st *</p> <p>2nd</p> <p>3rd</p> <p>*The module by direct mounting is recognized first.</p> <ul style="list-style-type: none"> ▪ When you connect a TM3 module and Transmitter on the rear of STC-6300TA, connect the TM3 module as the 1st module, and connect the Transmitter as the 2nd. ▪ If Direct Mount and Extension Mount are used at the same time, Direct Mount will be recognized first and then Extension Mount. However, there will not be much differences in connection speed. |

* TM3 module and EX module can be used together.

* To use TM3 Transmitter and Receiver, no setting on Software is required.

NOTE: For TM3/EX module installation, please refer to [Modicon TM3 guidebook for setting up a connection to HMI](#).

2-4. Option compatibility – Serial Interface

- Serial Interface

| Product Name | LT-3300T | STC-6300TA | Description | Compatibility |
|--|------------------|------------------|--|---------------|
| RS-232C Cable (5m) | CA3-CBL232/5M-01 | CA3-CBL232/5M-01 | Connects a host controller to the GP unit.(RS-232C) | ✓ |
| RS-422 Cable (5m) | CA3-CBL422/5M-01 | CA3-CBL422/5M-01 | CA3-CBL422/5M-01 Connects a host controller to the GP unit. (RS-422 / Socket Type) | ✓ |
| RS-422 Cable (5m) | CA3-CBL422-01 | CA3-CBL422-01 | Connects a host controller to the GP unit. (RS-422 / Plug Type) | ✓ |
| RS-422 Terminal Block Conversion Adapter | - | PFXZCBADTM1 | Connects output from a serial interface (D-sub 9 pin plug) directly to an RS-422 terminal block. | NEW |
| RS-232C Isolation Unit | CA3-ISO232-01 | CA3-ISO232-01 | Connects a host controller to this product and provides isolation (RS-232C and RS-422 are switchable). | ✓ |
| COM Port Conversion Adapter | CA3-ADPCOM-01 | CA3-ADPCOM-01 | Connects optional RS-422 communication items to serial interface. | ✓ |
| | - | PFXZC3ADCM1 | | NEW |
| Terminal Block Conversion Adapter | CA3-ADPTRM-01 | CA3-ADPTRM-01 | Connects output from a GP unit's Serial Interface (D-sub 9 pin socket) directly with an RS-422 terminal block. | ✓ |

2-4. Option compatibility – USB (Type A) Interface

- USB (Type A) Interface

| Product Name | LT-3300T | STC-6300TA | Description | Compatibility |
|--|---------------|-----------------|---|---|
| USB Transfer Cable (2m) | CA3-USBCB-01 | - | Cable for transferring screen data between a PC (USB Type A) and the GP unit (USB Type A) | - A to A screen transfer is not available. |
| USB Cable (5m) | FP-US00 | FP-US00 | Connects a USB printer (Type B) | ✓ |
| USB Front Cable (1m) | CA5-USBEXT-01 | CA5-USBEXT-01 | Extension cable that attaches USB interface (Type A) to front panel | ✓ |
| USB-Serial (RS-232C) Conversion Cable (0.5m) | CA6-USB232-01 | CA6-USB232-01 | Cable for converting a USB interface into a serial interface (RS-232C) | ✓ |
| USB Clamp Type A (1 port) | - | PFXZCBCLUSA1 | Clamp to prevent disconnection of USB cable (USB/A, 1 port, 5 clamps/set) | NEW |
| USB/RS-422/485 Conversion Adapter | - | PFXZCBCBCVUSR41 | Adapter for connecting this product (USB Type A) to an external device (RS-422/RS-485) | NEW |
| EZ Illuminated Switch | - | PFXZCCEUSG1 | A unit of 5 illuminated switches with multiple color LED easily connected with this product unit via USB | NEW |
| EZ Tower Light tube mounting fixing plate | - | PFXZCETWHA1 | USB Connection Type Monolithic EZ Tower Light tube mounting with fixing plate 3 tiers, Ø60, lighting and flashing with a buzzer | NEW |
| EZ Tower Light with base mounting | - | PFXZCETWW1 | USB Connection Type Monolithic EZ Tower with base mounting 3 tiers, Ø60, lighting and flashing with a buzzer | NEW |
| EZ LAN Adapter | - | PFXZCGEUUE1 | An adapter to expand an Ethernet port to HMI | NEW |

2-4. Option compatibility – USB (micro-B) Interface, Others

- USB (micro-B) Interface

| Product Name | LT-3300T | STC-6300TA | Description | Compatibility |
|---------------------------|----------|-------------|---|---------------|
| USB Transfer Cable | - | PFXZUSCBMB2 | Cable for transferring screen data from a PC (USB Type A) to this product (USB micro-B) | NEW |
| USB (micro-B) Front Cable | - | PFXZCIEXMB2 | Extension cable that attaches USB interface (micro-B) to front panel | NEW |

- Others

| Product Name | LT-3300T | STC-6300TA | Description | Compatibility |
|-------------------------|--------------|------------|---|---------------|
| Screen Protection Sheet | CA3-DFS6-01 | - | Disposable, dirt-resistant sheet for the main unit screen (5 sheets/set) (Hard type) | - |
| | - | PFXZCBDS61 | | NEW |
| UV Protection Sheet | - | PFXZCFUV61 | Sheet to protect the display from ultraviolet light (1 sheet) | NEW |
| Protective Cover | CA4-DCMDL-01 | - | The installation of the cover is to protect Display from leaking liquid and raise resistant performance against chemical substance (5 sheets) | - |
| Environment Cover | - | PFXZCBOP61 | Disposable, environmental resistant cover (1 sheet) | NEW |

2-4. Option compatibility – Maintenance

- Maintenance Options

| Product Name | | LT-3300T | STC-6300TA | Description | Compatibility |
|---------------------------|------------|---------------|---------------|--|---|
| Installation Fastener | | CA3-ATFALL-01 | - | Used to install the GP unit into a solid panel (4 pieces/set) | NEW Use the option for STC6000 series. |
| | | - | PFXZC3AT1 | Installation fastener (4 pieces/set) | |
| Installation Gasket | LT-3300T | CA3-WPG6-01 | - | Provides dust and moisture resistance when this product is installed into a solid panel (1 piece). | NEW Use the option for STC6000 series. |
| | STC-6300TA | - | PFXZHWG31 | | |
| DIO Connector | | CA7-DIOCN5-01 | CA7-DIOCN5-01 | Connectors for interfacing with external I/O devices (5 pieces/set). | ✓ |
| USB Clamp Type A (1 port) | | CA7-USBAT6-01 | - | Clamp to prevent disconnection of USB cable (USB/A, 1 port, 5 clamps/set) | - This is included in the package of LT-3300T, not included in STC-6300TA. |
| DC Power Supply Connector | | CA5-DCCNM-01 | CA5-DCCNM-01 | Connector to connect DC power supply cables (5 pieces/set) | ✓ |
| EX Module Securing Hook | | CA7-FIXEXM-01 | - | Hook for securing three EX modules to the LT-3300 Series | - |
| TM3 Module Securing Hook | | - | PFXZHMISH1 | TM3 module securing hook (1 piece) | NEW |
| Panel Cutout Adapter | | CA4-ATM5-01 | - | Panel cutout adapter for mounting LT-3300 Series in cutout of LT Series. | - |
| Battery for Data Backup | | - | PFXZGEBT1 | Primary battery for memory and time data backup (1 piece) For all ST6000 series | NEW |

2-4. Option compatibility – Supported EX Modules (End of Sale: March 2023)

| Product Name | | Model No. | Recommended Substitute TM3 Module name | LT-3300T | STC-6300TA |
|------------------------|--|-----------------|--|----------|------------|
| Standard Input Module | EX module (8-point input module) | EXM-DDI8DT | TM3DI8 | ✓ | ✓ |
| | EX module (16-point input module) | EXM-DDI16DT | TM3DI16 | ✓ | ✓ |
| Standard Output Module | EX module (8-point relay-output module) | EXM-DRA8RT | TM3DQ8R | ✓ | ✓ |
| | EX module (16-point relay-output module) | EXM-DRA16RT | TM3DQ16R | ✓ | ✓ |
| | EX module (8-point sink-output module) | EXM-DDO8UT | TM3DQ8U | ✓ | ✓ |
| | EX module (8-point source-output module) | EXM-DDO8TT | TM3DQ8T | ✓ | ✓ |
| | EX module (16-point sink-output module) | EXM-DDO16UK | TM3DQ16UK | ✓ | ✓ |
| | EX module (16-point source-output module) | EXM-DDO16TK | TM3DQ16TK | ✓ | ✓ |
| Standard I/O Module | EX module (4-point inputs/4-point relay-output module) | EXM-DMM8DRT | TM3DM8R | ✓ | ✓ |
| | EX module (16-point inputs/8-point relay-output module) | EXM-DMM24DRF *1 | TM3DM24R | ✓ | ✓ |
| Analog Input Module | EX module (2-ch analogue-input module) | EXM-AMI2HT | TM3AI2H | ✓ | ✓ |
| | EX module (4-ch Analog input / Temperature input module) | EXM-AMI4LT | TM3TI4 | ✓ | ✓ |
| | EX module (8-ch Pt100/Pt1000 input module) | EXM-ARI8LT *1 | TM3TI4 (x 2) | ✓ | ✓ |
| Analog Output Module | EX module (1-ch analogue-output module) | EXM-AMO1HT | TM3AQ2 | ✓ | ✓ |
| | EX module (2-ch analogue-output module) | EXM-AVO2HT | TM3AQ2 | ✓ | ✓ |
| Analog I/O Module | EX module (Thermocouple Pt100 input/1-ch analogue-output module) | EXM-ALM3LT | TM3TM3 | ✓ | ✓ |
| | EX module (2-ch analogue-input/1-ch analogue-output module) | EXM-AMM3HT | TM3TM3 | ✓ | ✓ |
| | EX module (4-ch analogue-input/2-ch analogue-output module) | EXM-AMM6HT | TM3AM6 | ✓ | ✓ |

*1: As for EXM-DMM24DRF and EXM-ARI8LT, only one EX module can be connected.

2-4. Option compatibility – Supported TM3 Modules

| Product Name | Model No. | | |
|--|-------------|--------------|-----------|
| | Screw type | Spring type | HE10 |
| 8-ch Sink/Source Inputs | TM3DI8 | TM3DI8G | - |
| 16-ch Sink/Source Inputs | TM3DI16 | TM3DI16G | - |
| 8-ch Relay Outputs | TM3DQ8R | TM3DQ8RG | - |
| 16-ch Relay Outputs | TM3DQ16R | TM3DQ16RG | - |
| 8-ch Transistor Sink Outputs | TM3DQ8U | TM3DQ8UG | - |
| 16-ch Transistor Sink Outputs | - | - | TM3DQ16UK |
| 8-ch Transistor Source Outputs | TM3DQ8T | TM3DQ8TG | - |
| 16-ch Transistor Source Outputs | - | - | TM3DQ16TK |
| 4-ch Sink/Source Inputs, 4-ch Relay Outputs | TM3DM8R | TM3DM8RG | - |
| 16-ch Sink/Source Inputs, 8-ch Relay Output | TM3DM24R *1 | TM3DM24RG *1 | - |
| 2-ch Voltage/Current Inputs | TM3AI2H | TM3AI2HG | - |
| 2-ch Temperature or Voltage/Current Inputs, 1-ch Voltage/Current Output | TM3TM3 | TM3TM3G | - |
| 4-ch Voltage/Current or Temperature Inputs | TM3TI4 | TM3TI4G | - |
| 2-ch Voltage/Current Outputs | TM3AQ2 | TM3AQ2G | - |
| 4-ch Voltage/Current Inputs, 2-ch Voltage/Current Outputs | TM3AM6 | TM3AM6G | - |

| Product Name | Model No. |
|---------------------------|-------------|
| Remote transmitter module | TM3XTRA1 *2 |
| Remote receiver module | TM3XREC1 *2 |

*1: As for TM3DM24R, only one TM module can be connected.

*2: These modules are used for Extension Mounting, to connect more than two TM3 modules.
For the connection method, refer to [Modicon TM3 guidebook for setting up a connection to HMI](#).

2-5. Other Important Notes on Hardware – different points from LT-3300T

- About Input Filter Function restrictions
 - In STC6000 Series, input delay time of all terminals are 5μs for ON→OFF / 5μs for OFF→ ON.

| LT-3300T | | STC-6300TA |
|--|---|--|
| X0, X2, X4, X6 Terminals | X1, X3, X5, X7, X8, X9, X10, X11 Terminals | All Terminals |
| There is an input delay time of 5 microseconds for ON→OFF and 5 microseconds for OFF→ON. When running sampling every 0.5 milliseconds, 5 microseconds (ON→OFF) + 0.5 milliseconds (Sampling Interval) + 5 microseconds (OFF→ON) = 0.51 milliseconds As a result, 0.51 milliseconds is the limit for the smallest input pulse width. | There is an input delay time of 0.5 milliseconds for ON→OFF and 5 milliseconds for OFF→ON. When running sampling every 0.5 milliseconds 0.5 milliseconds (ON→OFF) + 0.5 milliseconds (Sampling Interval) + 0.5 milliseconds (OFF→ON) = 1.5 milliseconds As a result, 1.5 milliseconds is the limit for the smallest input pulse width. | There is an input delay time of 5 microseconds for ON→OFF and 5 microseconds for OFF→ON. When running sampling every 0.5 milliseconds, 5 microseconds (ON→OFF) + 0.5 milliseconds (Sampling Interval) + 5 microseconds (OFF→ON) = 0.51 milliseconds As a result, 0.51 milliseconds is the limit for the smallest input pulse width. |

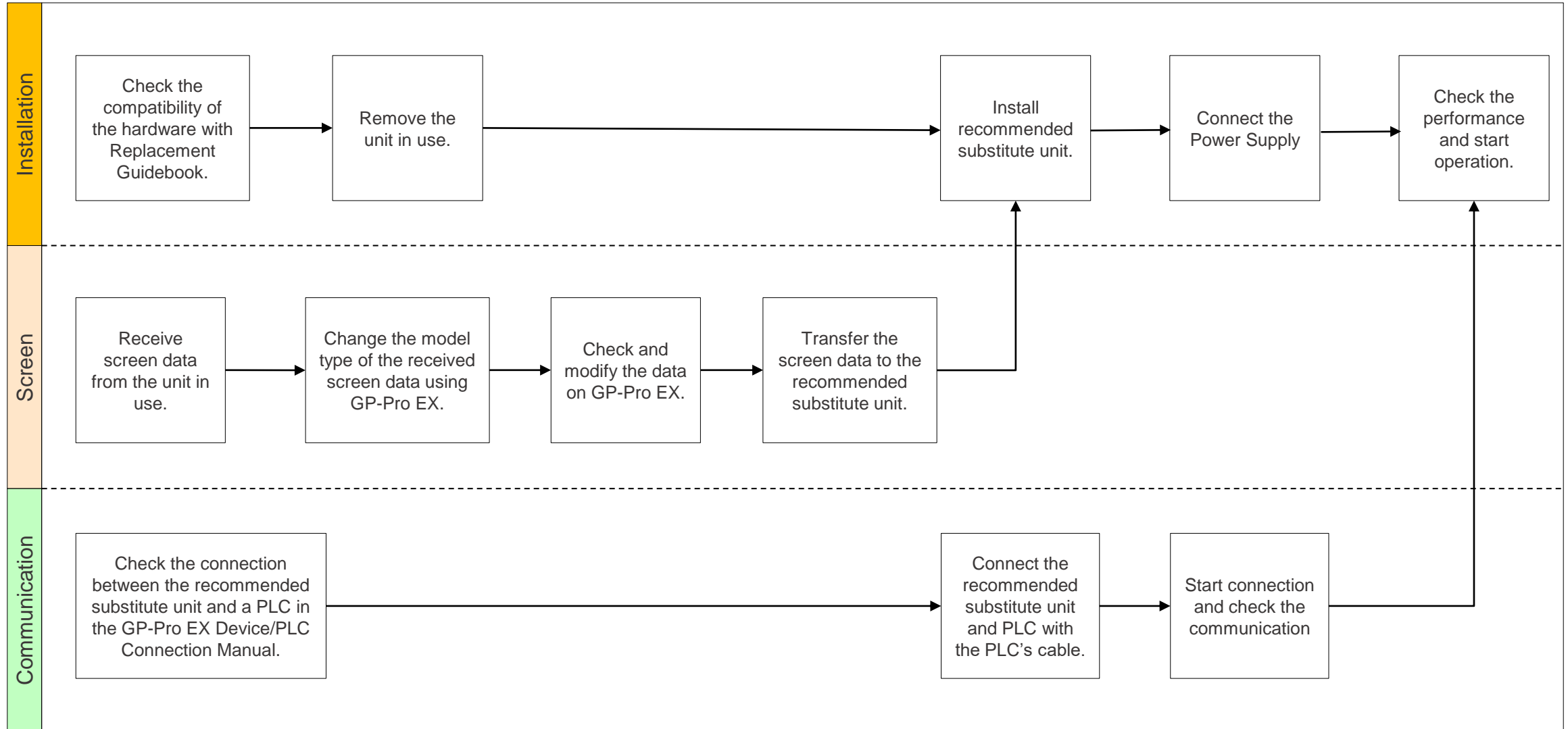
- About Pulse Output Usage restrictions
 - Pulse output maximum frequency is 65,000Hz in LT-3300T. When combining the number of CH and high-speed counters used, there is a limit to the maximum output frequency. For the detail, refer to GP-Pro EX V4.0 Reference Manual (31.5.14.2 Pulse Output Usage Restrictions).
 - In case of STC6000 Series, there is no such restriction. The pulse output maximum frequency is 65,000Hz in any case.
- High Speed Counter Filter
 - STC6000 Series support “None, 4μs and 40μs” filter.
 - LT-3300T does not have this feature.
 - For the detail, refer to GP-Pro EX V4.0 Reference Manual (31.5.6.8 Counter Input Filter – High Speed Counter).
- For the detailed information on each setting, please refer to [GP-Pro EX V4.0 Reference Manual](#).

2-5. Other Important Notes on Hardware

- Do not expose the hardware to direct sunlight. Recommend to use the option item “UV Protection Sheet” to protect the display from ultraviolet light.
- This product is not designed for outdoor use. UL certification obtained is for indoor use only.
- Do not turn on the hardware if condensation has occurred inside the device.
- The panel brightness may decrease when used for a long time in an environment continuously filled with inert gas. Please ventilate the control panel periodically.

3. Software Section

3-1. Replacement Procedure – Workflow



3-1. Replacement Procedure – Preparation

| | |
|---|--|
| Requirements for receiving screen data from the unit in use *1 | PC in which GP-Pro EX Transfer Tool is installed. *2 |
| | Transfer Cable (the followings can be used) USB transfer cable: CA3-USBCB-01 (Type A - Type A) *It's also possible to send/receive a screen via USB storage device or Ethernet. |
| Requirements for converting screen data of the unit in use and transferring the converted data to Recommended substitute unit | PC with GP-Pro EX installed STC-6300TA supported version: Ver. 4.09.500 or later |
| | Transfer Cable (the followings can be used) USB transfer cable: PFXZUSCBMB2 (Type A – Type micro-B) or commercially available USB micro-B transfer cable *It's also possible to send/receive a screen via USB storage device or Ethernet. |

*1: This step is required if screen data is saved only in the HMI unit, not in any other device.

If you already have the screen data backup, please go to “[3-1. Replacement Procedure – Change model to recommended substitute unit \(GP-Pro EX\)](#)”.

*2: Please use the same or later version of the software used when creating screens on the old model. If you don't know the software version, we recommend that you use the latest one. You can download the latest transfer tool from our website.

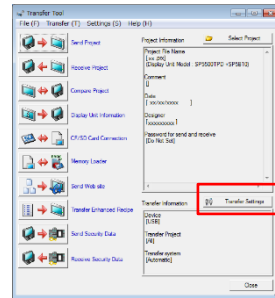
<https://www.pro-face.com/otasuke/>

3-1. Replacement Procedure – Receive Screen data from the model in use (GP-Pro EX)

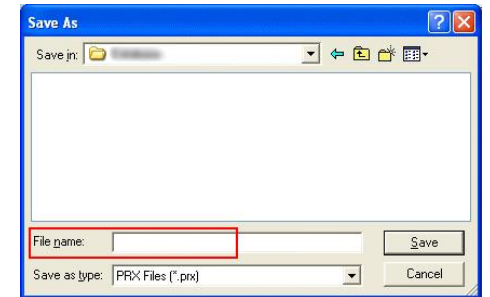
In this section, we will introduce how to receive screen data with a USB transfer cable as an example. If you have the backup of screen data, this step is not necessary. Please go to the next section.

1. Connect your PC and the model in use with a USB transfer cable. If the driver of the cable has not been installed on your PC yet, a dialog box will appear. Please follow the instructions.

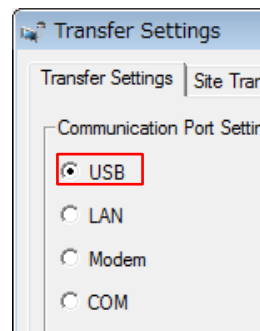
2. Start the Transfer Tool of GP-Pro EX.



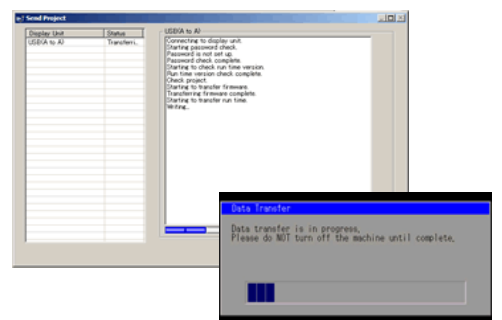
5. Click [Receive Project], and the following dialog box will appear. Specify a place to save the received data in and a project file name, and then click [Save] to start transfer.



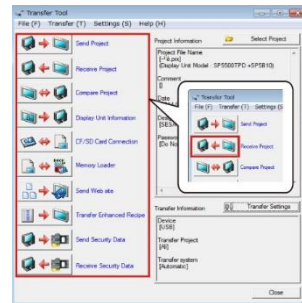
3. Make sure that the [Device] in the “Transfer Settings Information” is set to [USB]. If not, click the [Transfer Setting] button to open the “Transfer Setting” dialog box. Select [USB] in the Communication Port Settings field and click [OK].



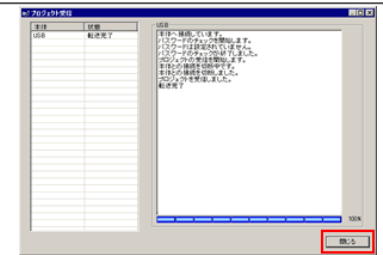
6. The following dialog box appears during transfer, and you can check the communication status. (The display unit enters the Transferring mode and communication with the device such as a PLC is terminated.)



4. Start GP-Pro EX Transfer Tool and click the [Receive Project] button.



7. When transfer is completed, the status displayed in the dialog box will change from [Transferring] to [Complete Transfer]. Click [Close] to close the dialog box.

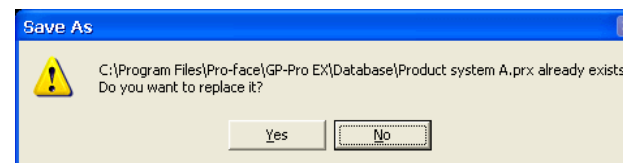
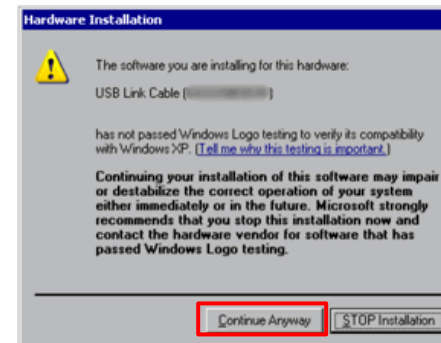


8. Close the Transfer Tool.

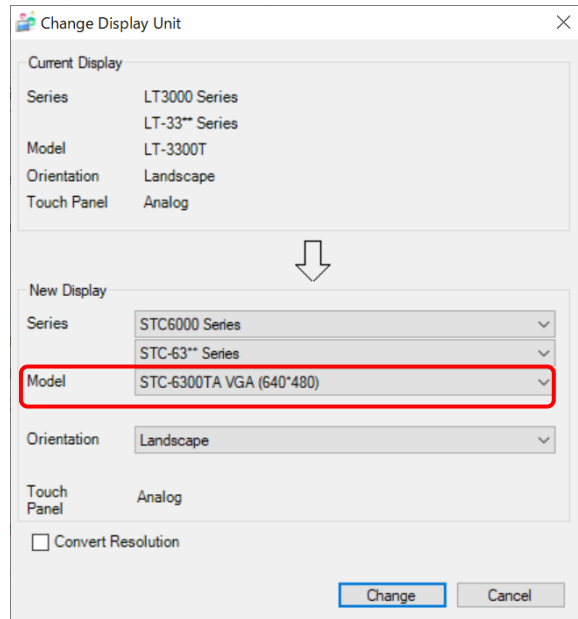
3-1. Replacement Procedure – Receive Screen data from the model in use (GP-Pro EX)

NOTES

- The “Hardware Installation” dialog box as shown on the right may appear during installing the USB driver depending on the security level of Windows®. Click [Continue Anyway] to start installing the driver. When installation is completed, click [Finish].
- When the file already exists, a window will appear asking if you want to overwrite the file.
- When receiving a project file that uses SD card/USB memory data such as Recipe Function (CSV data), the following dialog box will appear during the transfer. Please specify where to save the data. Click [OK] to return to the [Receive Project] dialog box and complete the transfer.



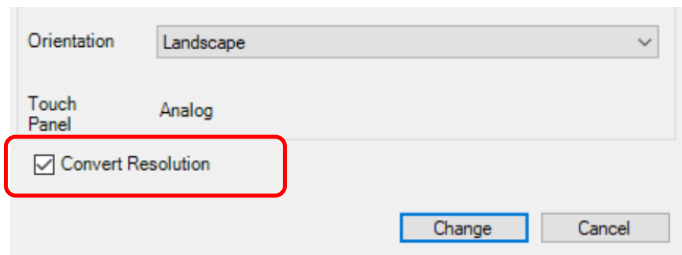
3-1. Replacement Procedure – Change model to recommended substitute unit (GP-Pro EX)



Change the Display unit from LT-3300T to STC-6300TA.

The display can be changed from the menu bar “Project” → “System Settings” → “Display” → “Change Display” in GP-Pro EX.

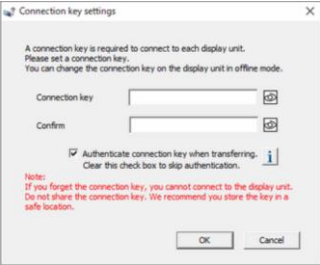

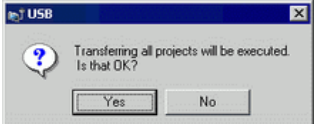
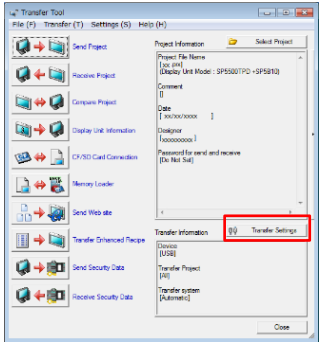
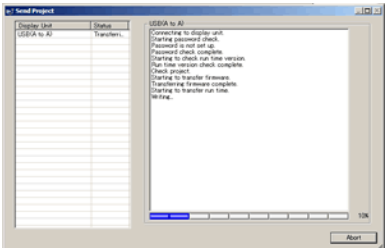
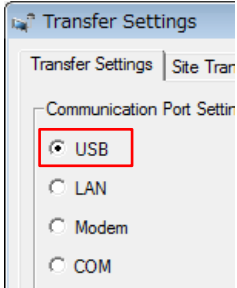
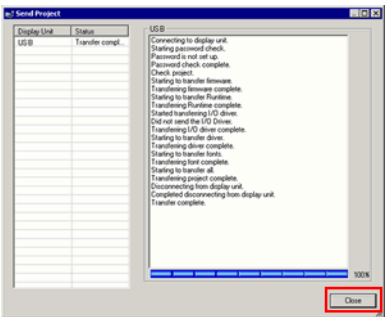
If you check on [Convert Resolution] when changing the Display Unit type (as shown below), you can adjust both size and location of the part and the text relative to the display resolution automatically. But still, you may need to adjust them manually. Please pay attention to the following points.



- A function that requires absolute coordinates. Please adjust the settings manually.
 - **Global window**
 - **Position Animation**
- Due to font size and resolution restrictions, manual changes may be required. Please resize them if needed
 - **Font:** In the case of using Standard font, the size will be smaller. You can improve by using Stroke font or Image font.
 - **Objects**
 - **Parts**
 - **Images**
 - **Alarm parts**
- Position may differ from the original project. Please check the coordinate of the window and adjust if needed.
 - **Window display**

3-1. Replacement Procedure – Transfer screen data to recommended substitute unit (GP-Pro EX)

In this section, we will introduce how to transfer screen data with a USB transfer cable as an example.

| | | | |
|--|--|--|---|
| <p>1. Connect your PC and the recommended substitute unit with a USB transfer cable. If the driver of the cable has not been installed on you PC, a dialog box will appear. Please follow the instructions.</p> | | <p>5. Click [Send Project]. In the dialog box that appears, set the connection key and click [OK].</p> <p>NOTE: If you forget the connection key, you will not be able to connect to the display unit. For more information about connection key, refer to GP-Pro EX reference manual (34.14.4 How the Connection Key Works).</p> |  |
| <p>2. Turn on the power of Recommended substitute unit. The “Welcome” screen will appear on the display unit. After transferring a project file once, this screen will not appear again.</p> |  | <p>6. When this dialog box appears, click [Yes]. This dialog box is not displayed when the same project file is sent again.</p> |  |
| <p>3. On the GP-Pro EX's State Toolbar, click the [Transfer Project] icon to open the Transfer Tool. To transfer a different project file, click the [Select Project] button and select a project file.</p> |  | <p>7. The transfer begins. The following dialog box appears during transfer, and you can check the communication status. (The display unit changes to Transferring mode and communication with the device/PLC is suspended.)</p> |  |
| <p>4. Make sure that the [Device] in the “Transfer Settings Information” is set to [USB]. If not, click the [Transfer Setting] button to open the “Transfer Setting” dialog box. Select [USB] in the Communication Port Settings field and click [OK].</p> |  | <p>8. When transfer is completed, the state of the dialog box changes from [Transferring] to [Transfer Complete]. Click [Close] to close the dialog box.</p> <p>9. Close the Transfer Tool</p> <p>10. Click the [X] mark on top right of the screen or [Project] → [Exit] to close GP-Pro EX.</p> |  |

3-2. Software Compatibility – GP-Pro EX Supported Feature Comparison

Specification UP in STC-6300TA

NOT supported in STC-6300TA

| GP-Pro EX Feature | | LT-3300T | STC-6300TA |
|-------------------|---|----------|------------|
| Display | Screen Area (Application memory, unit: byte) | 6M | 64M |
| | Portrait Installation | ✓ | ✓ |
| | Function Expansion Memory | - | - |
| | Installing the USB/RS-422/485 Conversion Adapters | - | ✓ |
| | MAC Address Display | ✓ | ✓ |
| External Storage | CF Card | - | - |
| | SD Card | - | - |
| | CFast Card | - | - |
| | USB storage | ✓ | ✓ |
| | FTP server | - | ✓ |
| System Settings | Drawing in 256 colors | ✓ | ✓ |
| | Reverse Display | - | - |
| | Color Blink | ✓ | - |
| | Synchronize Text Display with Text Table | - | ✓ |
| | Time Zone settings | - | - |
| | Detect Backlight Burnout | ✓ | - |
| | Dimmer settings | - | ✓ |
| | 2-point touch / Multitouch | - | - |
| | Display the SD/USB Removal Icon | - | ✓ |

3-2. Software Compatibility – GP-Pro EX Supported Feature Comparison

Specification UP in STC-6300TA

NOT supported in STC-6300TA

| GP-Pro EX Feature | | LT-3300T | STC-6300TA |
|--------------------------|--|----------|---|
| System Settings | Screen Capture | ✓ | ✓ |
| | SRAM Auto Backup | - | ✓USB storage can be used for the models without SD/CF card slots. |
| | Image Font | - | ✓ |
| | Bitmap Font | - | ✓ |
| | Standard Font | - | ✓ |
| | Port Control | - | ✓ |
| Device/PLC Communication | Number of Devices/PLCs that can communicate simultaneously | 1 *1 | 2 |
| | Specify Indirect Device | ✓ *2 | ✓ |
| | Import Device/PLC tags | - | ✓ |
| | Ethernet Multilink | - | ✓ |
| | Device Monitor | ✓ | ✓ |
| | Ladder Monitor | - | - |
| Transfer | Network Transfer | ✓ | ✓ |
| | Modem Transfer | ✓ | - |
| | SIO Transfer (COM Connection) | ✓ | - |
| | Memory loader feature | ✓ | ✓ |
| | CF/SD Card Connection | - | - |
| | Connection Key | - | ✓ |

*1: GP-Pro EX Ver.3.1 or later is required in order to communicate with devices/PLCs.

*2: Indirect device occupies 1 MB of the Screen Area.

3-2. Software Compatibility – GP-Pro EX Supported Feature Comparison

Specification UP in STC-6300TA

NOT supported in STC-6300TA

| GP-Pro EX Feature | | LT-3300T | STC-6300TA |
|-------------------|--|----------|------------|
| Common Settings | Change Backlight Color | - | - |
| | Clock Update Settings | - | ✓ |
| | Start Screen Settings | - | ✓ |
| | Date format on CSV file output | - | ✓ |
| | Divide destination folders by file numbers | - | ✓ |
| | Increase Alarm Type [Extended] settings and Text Table index numbers | - | - |
| | Alarm Message Multiple Line Display | - | ✓ |
| | Attach Data Value to Operation Log | - | ✓ |
| | Changing passwords at run time (CSV file) | - | ✓ |
| | Changing passwords at run time (password change screen) | - | ✓ |
| | Append Date/Time to CSV File Name | - | ✓ |
| | Transfer sampling CSV file to FTP | - | ✓ |
| | Transferring sampled data to the cloud | - | ✓ |
| | Indirectly specify Sampling Frequency and Alarm Settings | - | ✓ |
| | Sampling data/Enhanced recipe data format co-exist | - | ✓ |
| | Create a recipe (CSV data) index file at runtime | - | ✓ |
| | Enhanced Recipes | - | ✓ |
| | Extended Script copy file function | - | ✓ |
| | Global Trigger | - | ✓ |

3-2. Software Compatibility – GP-Pro EX Supported Feature Comparison

Specification UP in STC-6300TA

NOT supported in STC-6300TA

| GP-Pro EX Feature | | LT-3300T | STC-6300TA |
|-------------------|--|----------|---|
| Common Settings | Movie record/play feature | - | - |
| | Use Image unit | - | - |
| | Sound Output Feature | - | - |
| | AUX | - | - |
| | Retentive Variables Function | ✓ | ✓ |
| Parts | Selector List | - | ✓ |
| | XY Graph (Historical Trend, Data Block Display Graph) | - | ✓ *1 |
| | Picture Display [CF Image Display] / [SD Image Display] for showing JPEG files | - | ✓USB storage can be used for the models without SD/CF card slots. |
| | Indirectly specify a block of Alarm parts | - | ✓ |
| | Special Data Display [File Manager] sort function and default path | - | ✓ |
| | Special Data Display [File Manager] copy file to FTP | - | ✓ |
| | Message Display's Bulletin Message | - | ✓ |
| | Image Sensor Display | - | - |
| | Animation | - | ✓ |
| | Alarm History Message Flow Display | - | ✓ |
| | Alarm History / Sampling Data / Enhanced Recipe Data Refine Search / Sort Function | - | - |
| | Alarm Analysis Function | - | - |

*1 Supported by GP-Pro EX Ver.5.00.000 or later.

3-2. Software Compatibility – GP-Pro EX Supported Feature Comparison

Specification UP in STC-6300TA

NOT supported in STC-6300TA

| GP-Pro EX Feature | | LT-3300T | STC-6300TA |
|--|--|----------|-----------------|
| Logic | Logic Program Operation | ✓ | ✓ |
| | I/O Driver | ✓ | ✓ |
| | Function Block | ✓ | ✓ |
| Network | RPA Function (end of support from Ver.4.09.400) | - | - |
| | GP-Viewer EX | ✓ | ✓ |
| | Web Server (end of support from Ver.4.09.450) | - | - |
| | Camera-Viewer EX | - | - |
| | Pro-face Remote HMI | - | ✓ |
| | E-mail | - | ✓ |
| | GP Remote Printer Server | ✓ | ✓ |
| | Pro-face Connect (models you can register as SiteManager) | - | ✓ |
| | Pro-Server EX | ✓ | ✓ ^{*1} |
| | | | |
| Input Equipment / Peripheral Equipment (USB Device) | USB Keyboard | ✓ | ✓ |
| | EZ Illuminated Switch | - | ✓ |
| | EZ Tower Light | - | ✓ |
| | EZ LAN Adapter | - | ✓ |

^{*1} To use Pro-Server EX on STC-6300TA, GP-Pro EX Ver.4.09.550 or later is required.

3-2. Software Compatibility – Supported Software Version

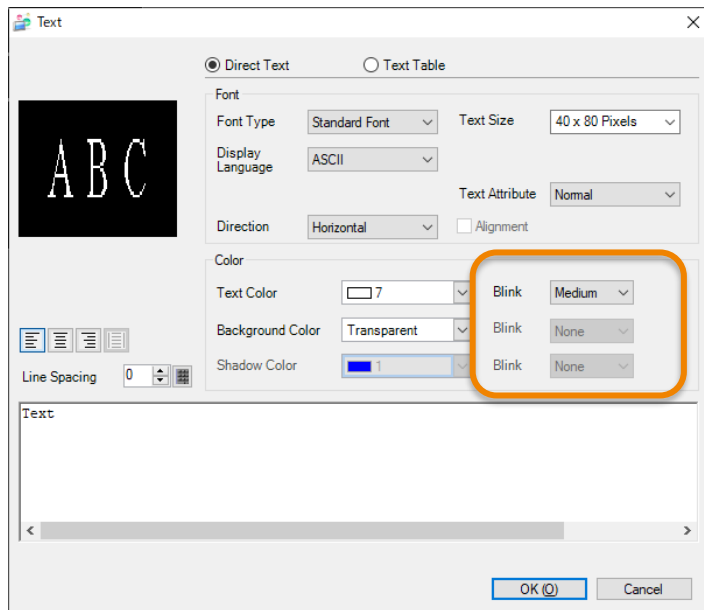
| Software | LT-3300T | STC-6300TA | Compatibility of Project Data |
|------------------------------------|---|---|-------------------------------|
| GP-Pro EX | ✔ Ver. 3.01.200 or later | ✔ Ver. 4.09.500 or later | ✔ |
| | https://www.pro-face.com/otasuke/files/manual/gpproex/new/refer/gpproex.htm | | |
| Pro-Server EX | ✔ Ver. 1.32 or later | ✔ Ver. 1.37.300 or later *1 | ✔ |
| | https://www.pro-face.com/otasuke/files/manual/soft/server_ex/v1_37/ref/SRPreface.htm | | |
| Pro-face Remote HMI (iOS/Android) | - | ✔ Ver. 1.60 or later | NEW |
| | - | https://www.pro-face.com/otasuke/qa/remotehmi/faq.html | |
| Pro-face Remote HMI Client for Win | - | ✔ Ver. 1.42 or later | NEW |
| | - | https://www.proface.com/en/product/soft/remotehmi_client/download | |
| Pro-face Connect | - | ✔ Ver. 9.6 or later | NEW |
| | - | https://www.proface.com/en/product/soft/proface_connect/download | |

*1 To use Pro-Server EX on STC-6300TA, GP-Pro EX Ver.4.09.550 or later is required.

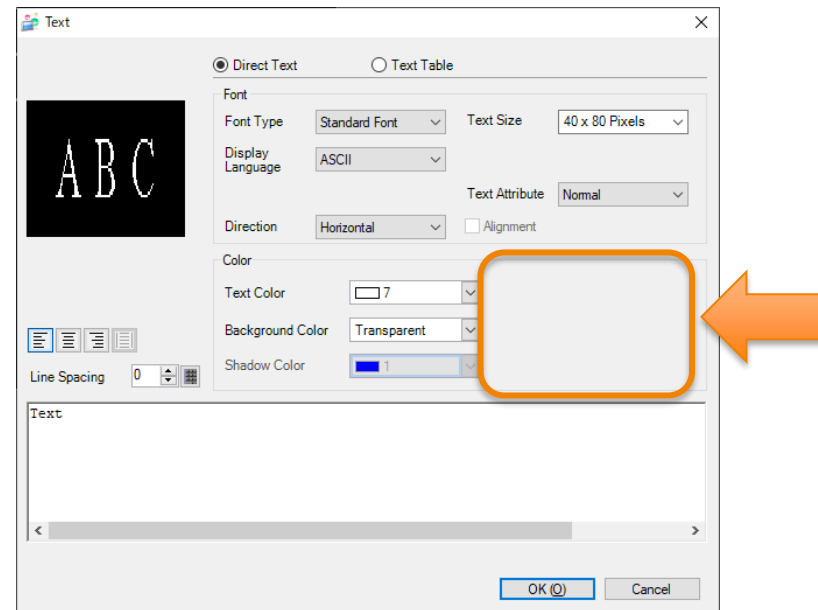
3-3. Other Important Notes on Software

- About Blink function
 - STC6000 Series do not support Blink function. Therefore, if you use the blink settings in LT-3300T, the settings will be cancelled after changing the display to STC6000 Series in GP-Pro EX.

LT-3300T



After converting the project to STC6000 Series



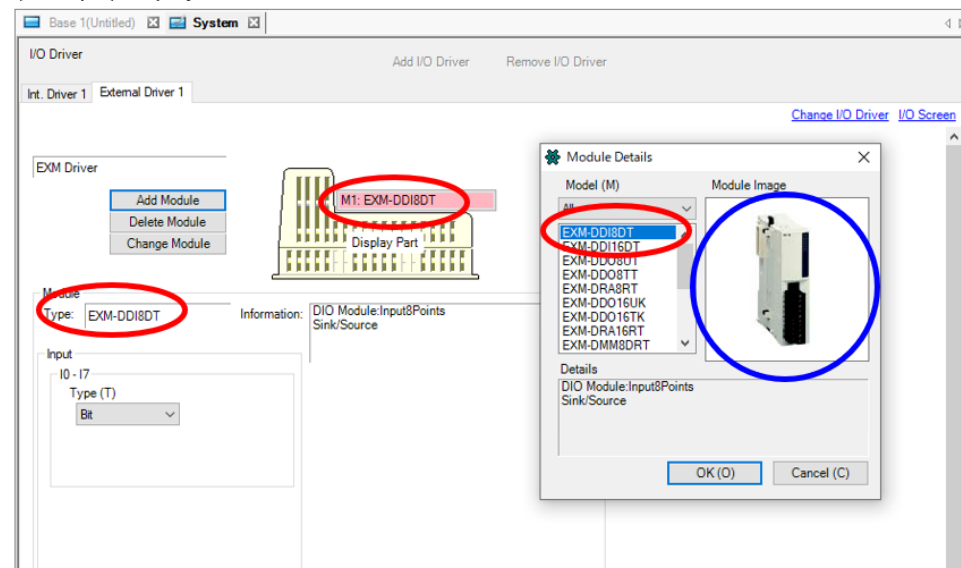
NOTE: We have a workaround to add blink functions to some of the parts/texts on STC6000 display by using the functions of the configuration software, GP-Pro EX. Refer to the following FAQ for the setting procedures.

<https://www.proface.com/en/support/faq/FAQ000268649>

3-3. Other Important Notes on Software – GP-Pro EX setting when using TM3 module

- TM3 Modules can be used as a successor to the EX modules.
- To connect EX modules to LT-3300T, [EXM Driver] is used as an external I/O driver. After converting LT-3300T screen data to STC-6300TA, the external I/O driver will automatically become [EXM Driver]. The I/O driver settings will be retained.
- TM3 module names do not appear in GP-Pro EX, so you need to select the equivalent EX module name instead. For example, to use TM3DI8, please select “EXM-DDI8DT”.

(Example) Display on GP-Pro EX



| EX module | TM3 module |
|---------------|-----------------|
| EXM-DDI8DT | TM3DI8 |
| EXM-DDI16DT | TM3DI16 |
| EXM-DRA8RT | TM3DQ8R |
| EXM-DRA16RT | TM3DQ16R |
| EXM-DDO8UT | TM3DQ8U |
| EXM-DDO16UK | TM3DQ16UK |
| EXM-DDO8TT | TM3DQ8T |
| EXM-DDO16TK | TM3DQ16TK |
| EXM-DMM8DRT | TM3DM8R |
| EXM-DMM24DRF | TM3DM24R |
| EXM-AMI2HT | TM3AI2H |
| EXM-ALM3LT | TM3TM3 |
| EXM-AMM3HT | TM3TM3 |
| EXM-AMO1HT | TM3AQ2 |
| EXM-AMI4LT | TM3TI4 |
| EXM-AVO2HT | TM3AQ2 |
| EXM-AMM6HT | TM3AM6 |
| EXM-ARI8LT *1 | TM3TI4 (x 2) *1 |

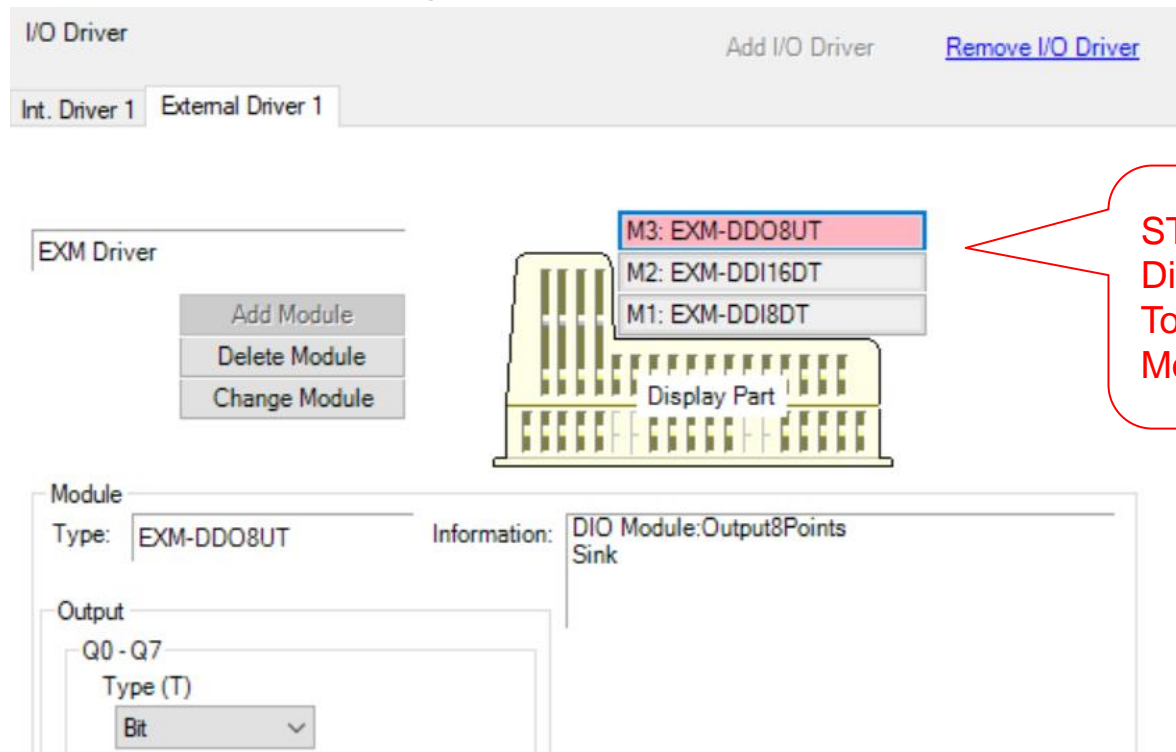
*1: please refer to the next page for the GP-Pro EX setting.

- The setup process, error information, and limitations are the same as EX modules. Refer to [GP-Pro EX V4.0 Reference Manual](#) section “31.6 Controlling I/O in LT3000/STC6000 Series and EX Modules”, by replacing “EX module” with “TM3”.

3-3. Other Important Notes on Software – GP-Pro EX setting when using TM3 module

- STC-6300TA supports up to 2 units of TM3/EX module on Rear (Direct) Mounting, but you can select 3 modules in I/O Driver setting as the image below. (There will be no error message displayed.)
- If you use 3 units of TM3/EX modules, use Extension Mounting method by using TM3 Transmitter (P/N: TM3XTRA1) / Receiver (P/N: TM3XREC1) as described in [2-3. Hardware Compatibility – TM3/EX Module Connection](#).
- For these Transmitter and Receiver modules, no setting is required in GP-Pro EX.

< GP-Pro EX screen image >



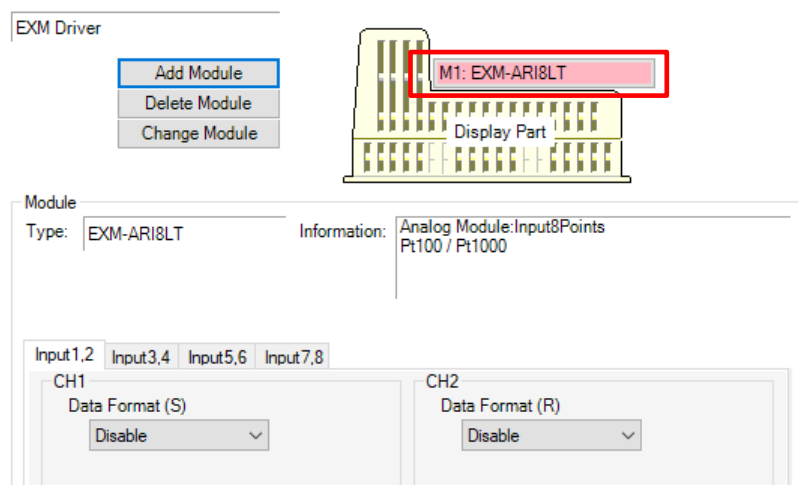
STC-6300TA supports 2 units on Direct mounting, not 3. To use 3 units, use Extension Mounting method.

3-3. Other Important Notes on Software – GP-Pro EX setting when using TM3 module

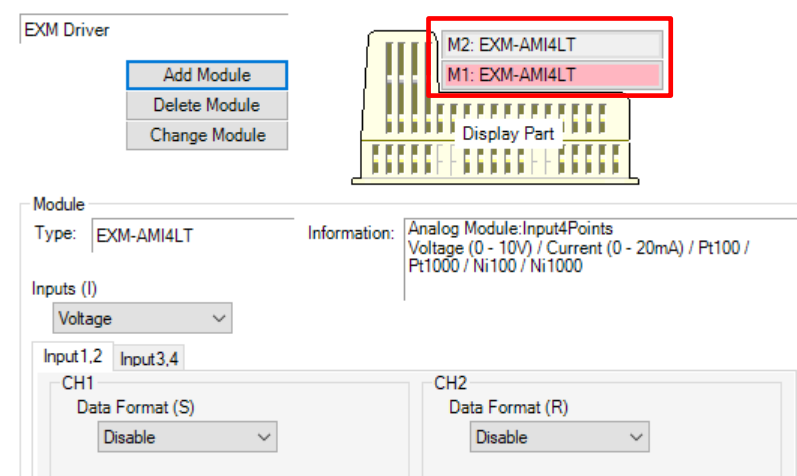
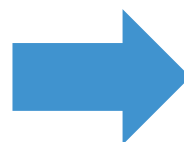
- EXM-ARI8LT is an 8-channel analog module, while the substitute model TM3TI4 has only 4 channels. Because of it, when 5 or more channels are used for EXM-ARI8LT, it's necessary to connect 2 units of TM3TI4 at the time of replacement.

| Description | EX Module | TM3 Module |
|---|------------|---------------|
| 8-ch Temperature Pt100/ Pt1000 Input Module | EXM-ARI8LT | TM3TI4(G) x 2 |

In the condition above, EXM-ARI8LT needs to be changed to 2 units of EXM-AMI4LT for the module configuration on GP-Pro EX as shown below.



EXM-ARI8LT x1

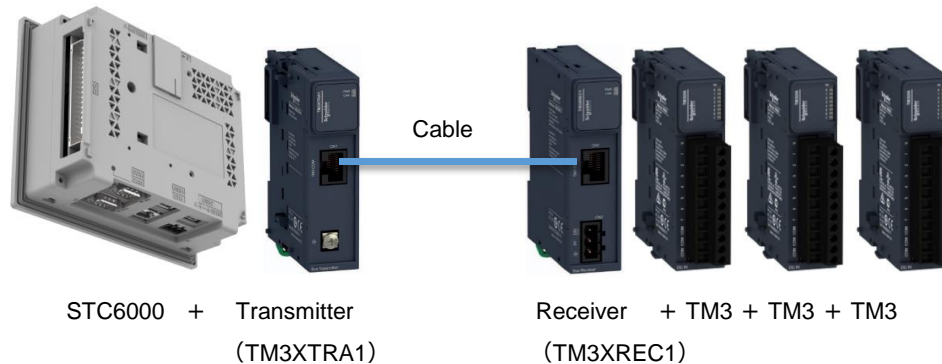


EXM-AMI4LT x2

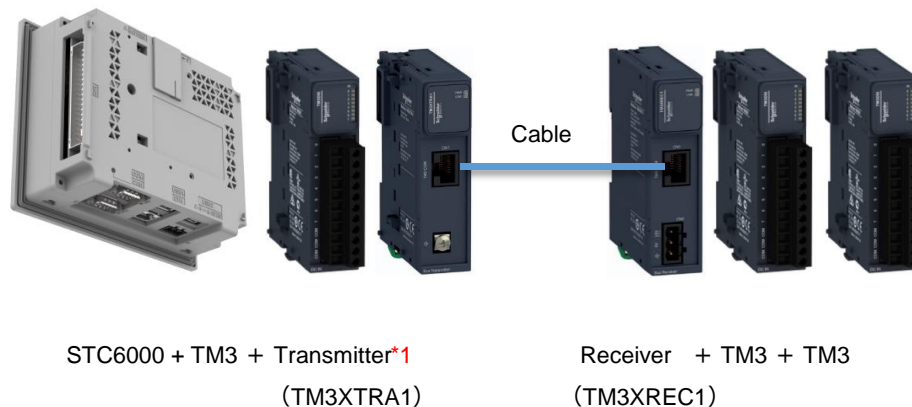
In case of connecting 3 units of TM3 / EX modules with STC6000 Series

If you connect 3 units of TM3/EX modules on STC-6300TA, Transmitter (TM3XTRA1) and Receiver (TM3XREC1) are required. Please connect with one of the following configurations.

- When mounting Transmitter only on the back of STC6000, you can connect max. 3 units of TM3/EX modules at Receiver side.



- When mounting one TM3/EX module and Transmitter on the back of STC6000, you can connect max. 2 units of TM3/EX modules at Receiver side.



*1 When mounting one TM3 module and one transmitter module on the rear of STC6000 Series, mount TM3 module first, and then mount the transmitter module as a 2nd unit.

NOTE: There's no setting required in Software for Transmitter and Receiver. Only 1 set of Transmitter and Receiver can be connected to 1 unit of STC6000. TM3 modules and EX modules can be used at the same time.

