

Emit Touch-Free Pro (TFP) is the latest touch-free control unit for orienteering. The TFP sends a continuous eLine signal containing the control's code. The range of this signal is up to 75 cm - depending on the speed of the runner. The control code and passing time are stored in all *emiTags* that are within range.

Mechanics:

TFP is moulded in a very solid plastic, with a massive plate in the bottom for solidity and stiffness. There are one foil covering the whole front of the unit. Size: 220x177x22mm. Weight: 300 gram.

Mounting:

There are several holes designated for screws and/or straps at the top and the bottom of the TFP-unit.

Electronics:

The electronics consists of the main unit with an eLine circuit - which sends a continuous signal containing the control's code. This code is registered and saved by all *emiTags* within the field, which has a range of up to 75 cm - depending on the speed of the runner. The TFP also has a standard control unit embedded on the circuit board. This makes it possible for runners with traditional e-cards to get the correct code registered, by «punching» at the front of the TFP, at the e-card silhouette.

**Batteries:**

The TFP uses four AA 3,6V lithium-batteries, which will last for a min. of 5.000 operating hours / 10 years.

Function:

The TFP is operated by using a single button - located under the emit-logo at the front of the unit. Turn the TFP on by pressing this button for a minimum of 3 seconds. The LED located under the button flashes rapidly for 2 seconds, to confirm that the unit is on. The TFP will stay active for 36 hours if it is not turned off manually. To reactivate the TFP for another 36 hours, press the button briefly and wait for the LED to flash rapidly for 2 seconds - just as it did when it was turned on originally. It is also possible to activate TFP for a whole month, for use in e.g. self-timing. This is done by pressing the button 3 times in succession. The LED will then flash quickly, and stop flashing after 2.5 seconds. TFP shows that it is in «month-mode» by a short flash with the LED approximately every seven seconds. A short press of the button reactivates the TFP for another month. To turn off the TFP, hold down the button for 10 seconds - before releasing it. TFP acknowledges with slow flashes.

The TFP also flashes rapidly when punching with a traditional e-card at the designated area on front of the unit. *Touch-Free Pro* control units are available as 'START' with code 0, 'FINISH' with code 90, and ordinary codes between 100 and 199.

All TFPs used at an event should be turned off when they are collected, to avoid false registrations.