

TTR-04W-24

Electromechanical Tripod Turnstile
for outdoor application under shelter



Technical Specification

Drive:	Hand operated
Orientation:	The same turnstile can be installed as either left hand or right hand unit.
Design:	The TTR-04W-24 consists of a turnstile housing, a remote control unit with a built-in standby power supply (SPS), a remote control panel and a set of barrier arms. The turnstile housing is a formed and welded metal structure with a cover. A LED indication display is located on the front panel of the cover. The turnstile housing is equipped with a built-in thermocontrol system as standard.

Materials:	Turnstile Housing: steel, powder coated Tripod Hub: mild steel, painted black Barrier Arms: AISI 304 stainless steel tube with plastic caps, polished diam. 32mm
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Function:	The turnstile is intended for bi-directional single or multiple passages. Access can be controlled in either direction.
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Status / Direction Light Indication:	The large LED display with bright pictograms for status and direction indication (standard feature):
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- Green Arrow indicates the direction of authorised passage; the turnstile is open in the set direction;
- Red Cross indicates ban on passage; the turnstile is locked.



Thermocontrol System:	The built-in thermocontrol system maintains a preset temperature inside the turnstile housing. A small LED indicator placed in the left bottom corner of the housing LED display shows the current status of the thermocontrol system. When the thermocontrol system is on, it is indicated by Green Light; Amber Light indicates that the heater is in operation.
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Control over Turnstile	The turnstile can be operated autonomously from cable or wireless remote control panel as well as from any identification or access control system: • Electrical controls for both entry and exit operation are as standard. • The turnstile is a Normally Closed unit – the mechanism is locked until a valid authorisation signal is received or the turnstile is unlocked with a mechanical release key.
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Control Mechanism Components:	Operation of the turnstile is controlled by an electro-mechanical head mechanism with the following standard features: • a self-centering mechanism to ensure automatic complete rotation of the barrier arms to home position regardless of the force used to pass through the turnstile;
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- a control mechanism with optical arm rotation sensors and a locking device:
 - the arm rotation sensors track passages through the turnstile to ensure accurate count inputs to access control systems for reports generation;
 - the locking device securely locks the turnstile in home position after each passage;
- a hydraulic damper to ensure smooth and quiet operation;
- a mechanical release lock to unblock the turnstile with a key in the event of emergency.

Operating Modes:

The turnstile features **6** operating modes set from the remote control panel:

- single passage in the set direction (open for passage of one person in the permitted direction)
- bi-directional single passage (open in both directions for 'one-by-one' passage)
- free passage in the set direction (open for multiple passages in the permitted direction)
- free passage in the set direction, single passage in the opposite one (open for multiple passages in the permitted direction and for passage of one person in the opposite direction)
- always free (open for entry and exit)
- always locked (closed for entry and exit)

Interface:

The turnstile is controlled via the remote control unit CU-02N. The CU-02N comes as a separate device in a powder coated metal case with pull-resistant fasteners for wall mounting. It can be also desk-mounted.

Note. The control unit is intended for indoor installation only and can be operated at the ambient temperature from +1°C to +40°C and relative air humidity up to 80% at +25°C.

The CU-02N contains the power transformer, the control board and the SPS with a battery (12V).

The CU-02N power supply can be effected either from the AC mains 220V/50Hz or from the external DC power supply 12V via the CU "Bat=12V" connector.

The standard features are as follows:

- pre-set timeout facility;
- relay inputs/outputs for connection of remote indicators, status lights, intrusion detectors, sensors and sirens;
- uninterrupted power supply (UPS) to maintain all control facilities for 1,000 operations or 4 hours whichever the sooner.

The logic is protected against short circuits, overloads and polarity inversion.

The turnstile housing, the control unit and the remote control panel are connected with cables.

Timeout Facility:

The turnstile has a preset timeout period (the passage waiting time) when it is unlocked for the passage in the permitted direction.

The passage waiting time is determined by the CU-02N internal program setting and equal to 5 seconds or set by the ACS.



Power Failure:

The turnstile retains the set position for each direction when the power supply voltage is removed – the open passage direction remains open, the closed passage direction remains closed.

In case of the AC mains failure the turnstile remains in operation and switches to:

- the SPS built into the control unit. Operation time with the built-in battery is no less than 4 hours or 1,000 passages provided that the battery is fully charged.
- the built-in UPS battery if the control unit is operated from the external DC power supply 12V. Operation time depends on the UPS battery capacity.

To secure off-line operation of the thermocontrol system at power failure, an uninterruptible power supply (UPS) is required (available upon request).

When the AC mains is restored, the turnstile returns to normal operation from the AC mains, and the built-in SPS battery recharges automatically.

Key override control

The key override option allows the operating technician to unlock both directions of the turnstile if there is need to override the access control system or in case of emergency or power failure. The mechanical release lock is built into the turnstile housing as standard. The lock is keyed.



Available Colours and Finishes:

TTR-04WR-24 - corrosion-resistant poly-zinc coat plus sandpaper powder coating with pearl mica effect; light beige colour

Powder coating to colour of choice (according to RAL) is available. Time of manufacture and price quotation are specified individually.

Technical Specifications:

Power supply	220V AC / 50Hz
Operational voltage	12V DC
Operational voltage for thermocontrol system	24V AC
Throughput capacity (in the single passage mode)	30 persons/min
Overall dimensions (LxWxH) -housing -housing with barrier arms	280x260x1050 mm 870x810x1050 mm
Passage width	600 mm
Operating temperature range - housing - control unit	-40°C to +40°C +1°C to +40°C



Delivery Details:

The turnstile in the original package should be transported in closed freight containers or in other closed type cargo transport units. During storage and transportation the boxes can be stacked no more than 5 layers high.

Installation Details:

Installation requires a steady and level concrete floor (grade 400 or higher) or a firm and rigid foundation at least 150mm thick.

The turnstile is delivered partly assembled. Installation should be performed by skilled personnel only and in strict accordance with the manufacturer's instructions (supplied with the turnstile) and installation drawings.

Warranty:

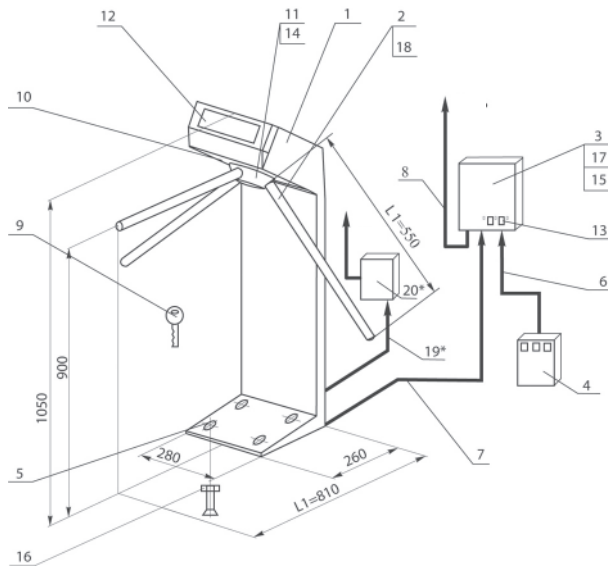
The manufacturer guarantees that the TTR-04W-24 turnstile complies with applicable statutory safety and electromagnetic requirements provided that the instructions on storage, installation and operation are observed. The warranty period is 24 (twenty four) months commencing from the date of sale.

Installation Examples

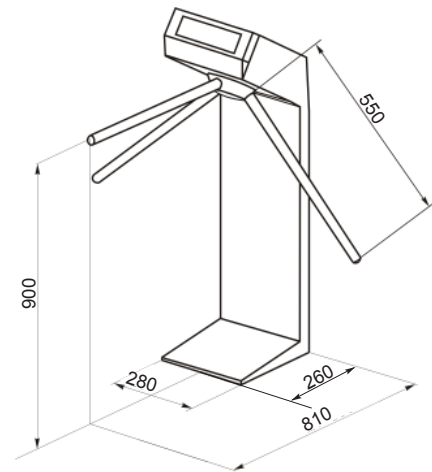


TTR-04W-24 Site Preparation

Overall view

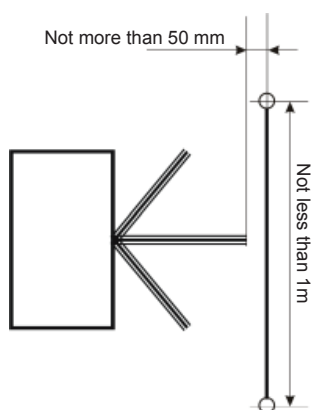


Overall dimensions

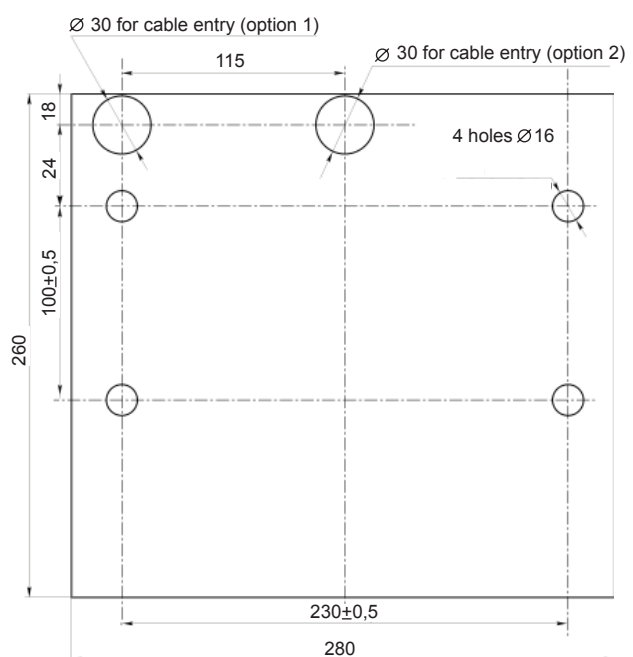


1 — turnstile housing; 2 — barrier arm; 3 — control unit (CU); 4 — remote control panel (RC); 5 — plastic plug; 6 — RC cable; 7 — turnstile housing cable; 8 — AC power cable; 9 — key; 10 — mechanical lock; 11 — hub; 12 — cover with LED indication display; 13 — CU indicator; 14 — rotation mechanism; 15 — dowel; 16 — M10x70 anchor bolt; 17 — 4x20 screw; 18 — fasteners for barrier arms; 19 — thermocontrol system power cable; 20 — thermocontrol system power supply unit.

Footprint Drawing



Floor anchor position and cable entries



Standard Delivery Set:

- turnstile housing with built-in thermocontrol system;
- control unit with built-in standby power supply and battery;
- standard barrier arms;
- LED indication display;
- cable remote control panel;
- mechanical release lock with 2 keys;
- overpack box

Available Options:

- Power supply 24V AC for thermocontrol system
- Wireless remote control kit with 2 tags (operation range of up to 40m)
- Intrusion detector
- Siren
- Anchor bolts



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