



Elektronski fiskalni uređaj
FP-700 MX



Korisničko uputstvo

SADRŽAJ

INT RASTER FP-700 MX

UVOD.....	3
Tehničke specifikacije	4
Bezbednosna uputstva	5
Sadržaj pakovanja.....	6
Osnovni elementi štampača	7
Spoljašnji izgled i i dimenzije	7
Prednja / zadnja strana	7
Štampač unutra.....	8
Konektori.....	8
Operacioni panel	8
Instalacija	9
Položaj štampača	9
Interfejsi.....	9
Podešavanje senzora "Papir pri kraju"	10
Postavljanje/zamena rolne papira.....	11
Podešavanje datuma i vremena	12
Registracija na SUF-u	12
LPFR	13
Kako odštampati fiskalni račun.....	13
Obrada zahteva sa ESIR-a	13
Bezbednosni element	14
Internet isčitavanje	15
Lokalno isčitavanje.....	15
Status LPFR-a	16
Preuzimanje komandi i prenos statusa izvršenih komandi	16
Dnevnik grešaka (LOG fajl).....	16
Aktuelne stope poreza	17
Rešavanje problema	18
Prilog 1 – Instaliranje bezbednosnog elementa	19
Prilog 2 – Podaci o dobavljaču	20
Prilog 3 – Kako odštampati fiskalni račun	21
Prilog 4 – Dodatne komande.....	35
Isključivanje / uključivanje automatske štampe fiskalnog računa	35
Štampanje slobodnog teksta.....	35
Prikaz informacija na eksternom displeju.....	37
Otvaranje fioke	37

UVOD

INT RASTER FP-700 MX

Karakteristike

INT RASTER FP-700 MX je Lokalni Procesor Fiskalnih Računa (LPFR) sa integrisanim termalnim štampačem širine 80 mm.

FP-700MX prima formirane fiskalne račune iz POS aplikacije, obradjuje ih i štampa.

Namenjen je za upotrebu u objektima sa većim obimom štampe, odlikuje ga robustnost i brzina štampe.

Karakteristike:

- Kompaktan, lak za upotrebu;
- Velika brzina (220 mm/s) štampe;
- Nizak nivo buke;
- Lako umetanje papira;
- Može se koristiti sa 2 vrste termo papira – širine 78 mm ili 58 mm;
- Serial RS232 ,USB, Ethernet interfejs i opciono 4G GPRS i Bluetooth
- Ugrađeni priključci za fioku i eksterni displej;
- Mehanizam za automatsko sečenje;
- “Papir pri kraju” senzor;
- Podržava HTTP protokol za komunikaciju;
- Štampanje alfanumeričkih i grafičkih podataka;
- Indikacija STATUSA i GREŠAKA je dostupna na LED ekranu i/ili zvučnim signalom;

1

Tehničke specifikacije

INT RASTER FP-700 MX

Metod štampe	Direct line thermal printer
Širina štampe	80 mm (640 tačaka)
Rezolucija	203 x 203 dpi (8 x 8 dpmm)
Brzina štampe	200 mm/s
Fontovi	Font A - 12 x 24 Font B - 9 x 24 Font C - 8 x 16
Štampa barkoda	QR Code
Tip papira	Termalna rolna
Širina papira	82 ili 58 mm
Debljina papira	60 do 150 µm
Maks.prečnik rolne	102 mm
Umetanje rolne	"Easy paper loading "
Sekač papira	Automatski
Displej operatera	Grafički LCD, 4 linije x 22 karaktera (128 x 32 px) LED pozadinsko osvetljenje HTTP / JSON format podataka, u skladu sa "Tehničkim vodičem" Poreske Uprave R.Srbije iz 2021.godine
Komunikacioni protokol	RS-232C USB 2.0 LAN – 100 Mbps (100BASE-TX) Sef za novac - RJ11 konektor Eksterni displej - RJ11 konektor Opciono: GPRS 4G, WI-FI, Bluetooth SAM Slot (Bezbednosni element - BE)
Konekcije	
LED indikacije	Kraj papira Otvoren poklopac On/Off
Tasteri	Feed - povlačenje papira 4 funkcijska tastera
Napajanje	AC 100 do 240 V, 50 to 60 Hz, DC 24 V, 2.1 A
Izdržljivost	150 km (Termalna glava) 1.5 miliona sečenja (Auto cutter)
Sertifikati	CE
Dimenzije Š x D x V	150 x 185 x 130 mm
Masa	1700 g
Radni temperaturni opseg	-10 do 40 °C, 35 do 85 % RH
Skladišni temperaturni opseg	-20 do 60 °C, 10 do 90 % RH

BEZBEDNOSNA UPUTSTVA



Upozorenje

- Nemojte koristiti niti čuvati štampač na mestima gde će biti izložen: direktnoj sunčevoj svetlosti; hemikalijama; ulju, česticama čelika ili prašini.
- Ne stavljajte nikakve predmete na štampač. Budite oprezni kada nosite štampač. Ispuštanje štampača može prouzrokovati povrede ili oštećenje uređaja. Štampač mora da radi u horizontalnom položaju.
- Nemojte stavljati strane materije kao što su kopče i igle u štampač. Ovo može izazvati probleme.
- Nemojte prosipati piće kao što su čaj, kafa i sok po štampaču ili prskati insekticid po štampaču. Ako se prospe piće ili voda, prvo obavezno isključite napajanje, a zatim se obratite našem serviseru.
- Kada čistite površinu kućišta štampača, ne koristite krpu koja je natopljena razređivačem, trihloretilenom, benzinom, ketonom ili sličnim hemikalijama.
- Pravilno rukujte kontrolnom tablom. Nepažljivo, grubo rukovanje može izazvati probleme ili kvar. Nemojte koristiti alat sa oštrim ivicama kao hemijsku olovku za rad.
- Kada dođe do problema sa štampačem, ne pokušavajte da ga rastavite. Umesto toga, konsultujte naše servisno osoblje.
- Nemojte rastavljati ili prepravljati štampač.
- Redovno čistite prašinu sa glave štampača i druge nečistoće koristeći meku krpu natopljenu etil alkoholom.

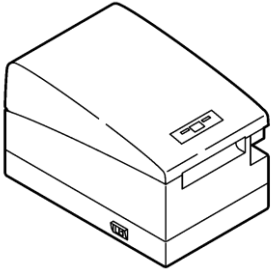



3

Sadržaj pakovanja

INT RASTER FP-700 MX

Kada raspakujete štampač, pažljivo proverite da li je sledeći pribor u pakovanju:

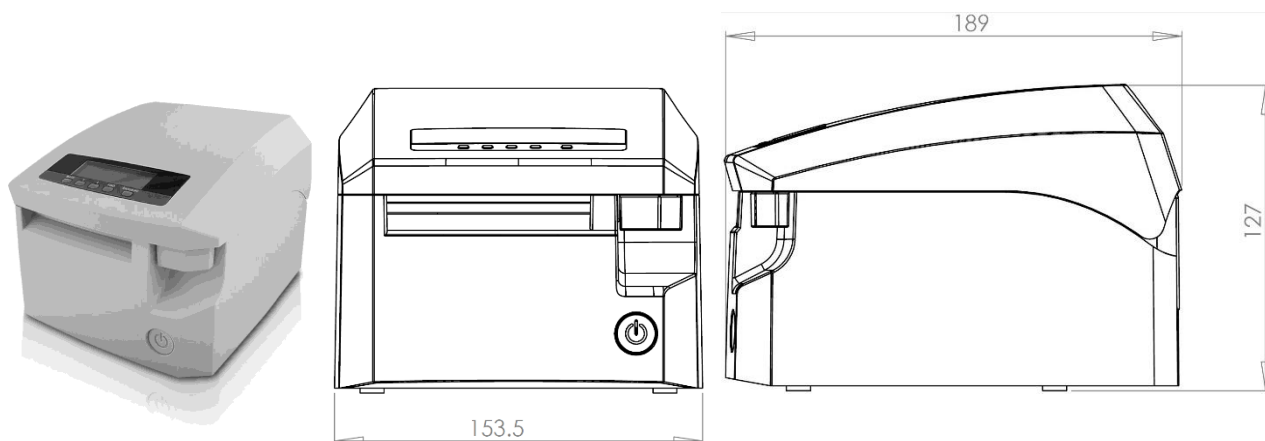
Stavk	Deo imena
1	FP-700 MX Termalni štampač 
2	AC/DC adapter
3	RS232 interfejs kabl
4	Test rolna termalnog papira 
5	Pregrada za 58/60 mm rolnu papira (ispod poklopca, unutar štampača)

4

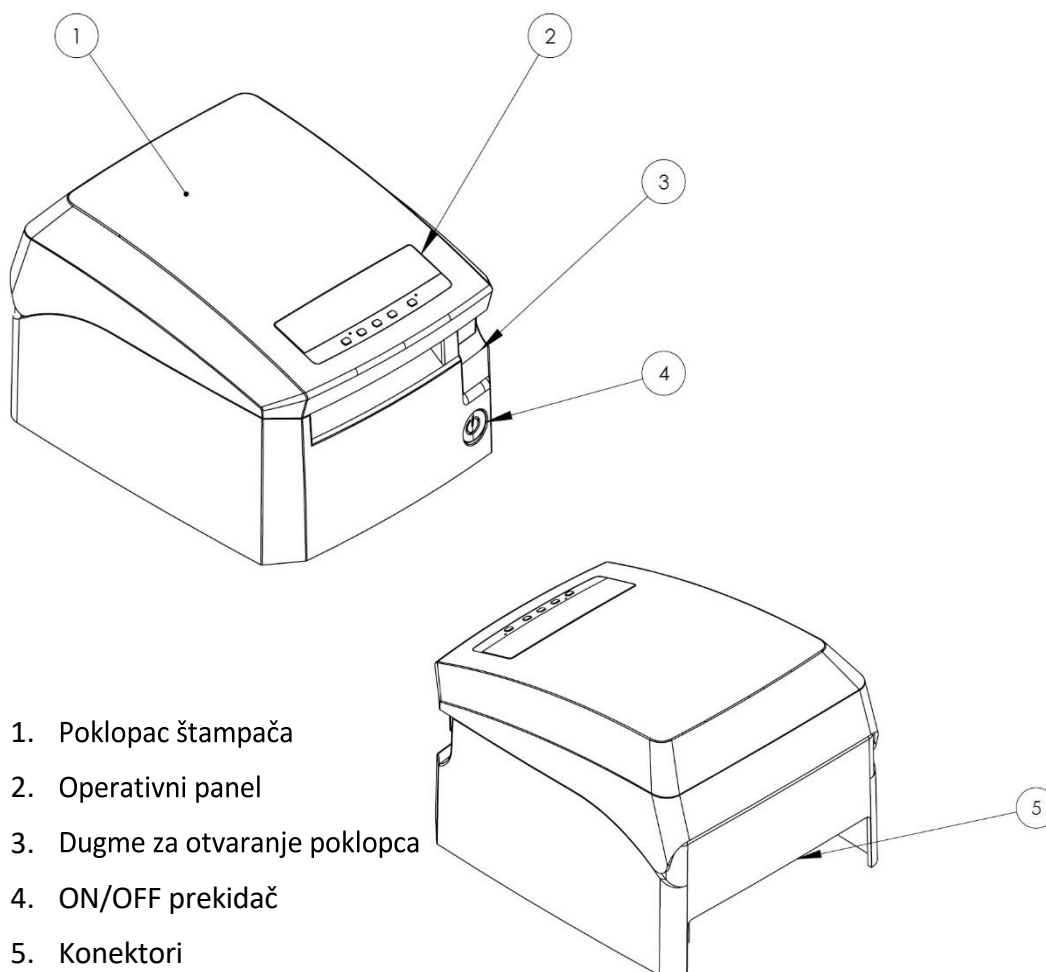
Osnovni elementi štampača

INT RASTER FP-700 MX

Spoljašnji izgled i i dimenzije

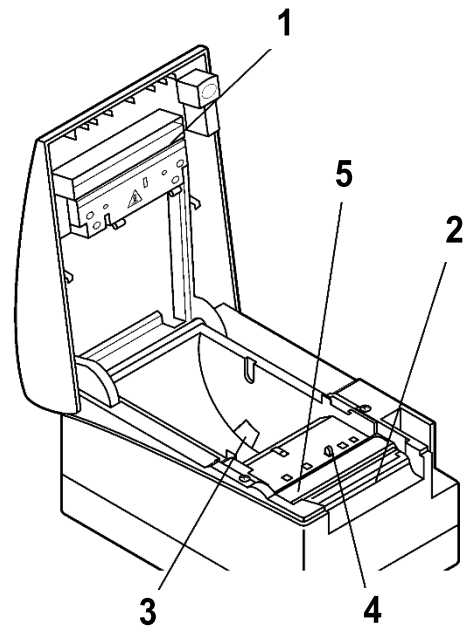


Prednja / zadnja strana



Štampač unutra

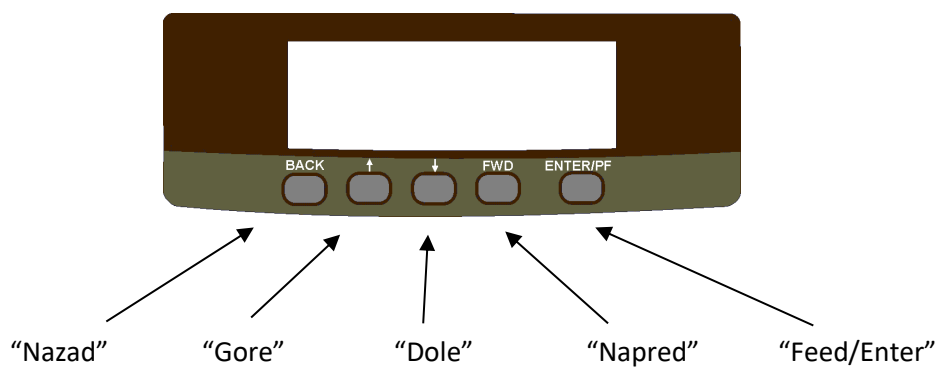
1. Termalna glava
2. Auto cutter
3. Senzor kraja papira
4. Senzor nestanka papira
5. Valjak za uvlačenje papira



Konektori



Operacioni panel



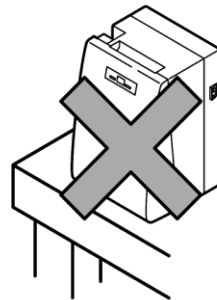
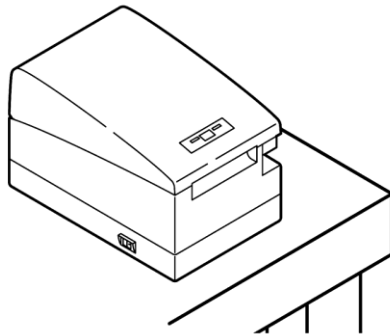
5

Instalacija

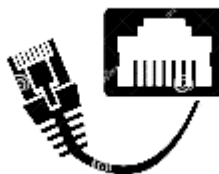
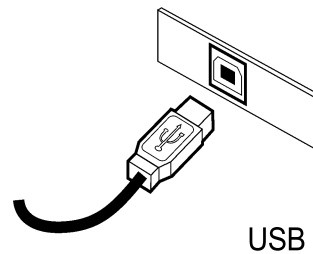
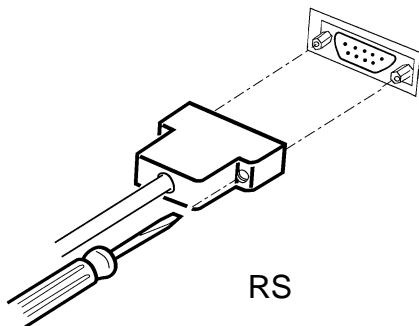
INT RASTER FP-700 MX

Položaj štampača

Štampač može da radi samo horizontalno. Nemojte ga postavljati vertikalno.



Interfejsi

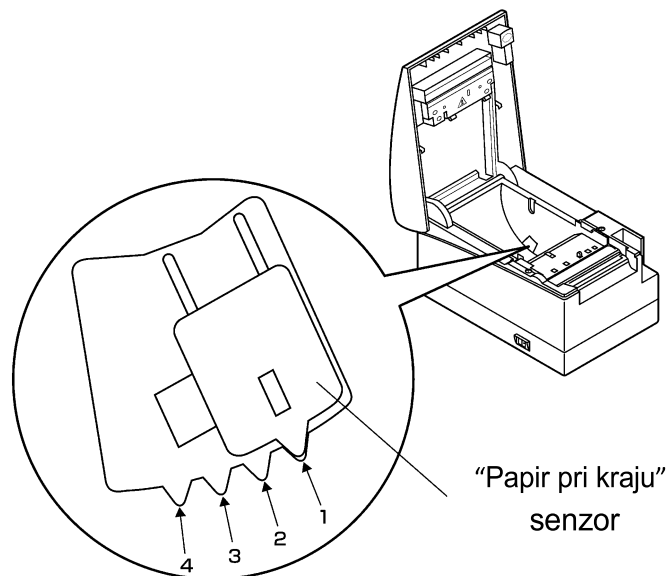


LAN – 100 Mbps RJ-45

Podešavanje senzora "Papir pri kraju"

1. Lagano pritisnite senzor
2. Pomerite senzor udesno ili ulevo dok ga držite pritisnutog. Položaj senzora prikazan je u nastavku, u zavisnosti od prečnika rolne koja se koristi.

Položaj senzora	Prečnik rolne papira za detekciju bliskog kraja (mm)	Spoljni prečnik korišćene rolne papira (mm)
1	22	18
2	25	22
3	29	25
4	34	32



Postavljanje/zamena rolne papira

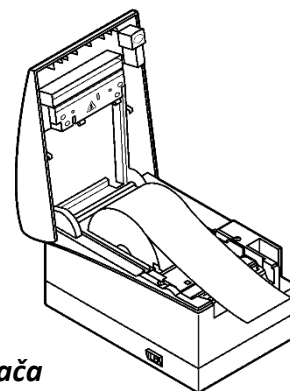
FP-700 MX koristi termo papirnu rolnu za štampanje. Širina i prečnik rolne papira su navedeni u tehničkoj specifikaciji štampača.

Da biste ubacili papir, jednostavno podignite poklopac papira i ubacite novu rolnu kao što je prikazano u koracima ispod.

1. Pritisnite dugme za otvaranje
2. Otvorite poklopac štampača
3. Umetnite novu rolnu papira.



Termo rolna mora biti postavljena kao što je prikazano na slici desno – termička površina medija mora biti okrenuta prema termalnoj glavi.

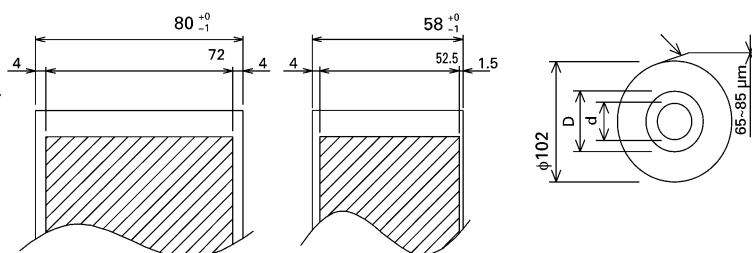


4. Zatvorite poklopac štampača dok se ne čuje klik.



Obavezno povucite najmanje 12 mm papira iznad vrha štampača pre zatvaranja.

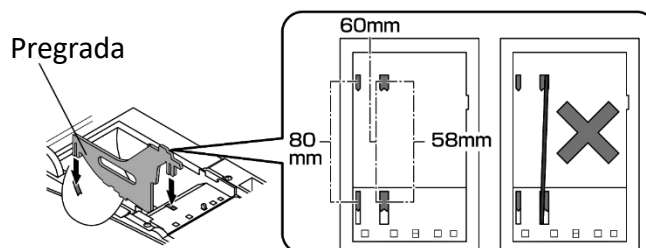
Preporučene dimenzije rolne papir



Maks. širina papira (mm)	80/58
Maks. širina štampe (mm)	72/52.5
Maks. prečnik rolne papira (mm)	102
Debljina papira (μm)	65-85
Spoljni prečnik jezgra (D) (mm)	18 (za 65-75 μm) / 32 (za 75-85 μm)
Unutrašnji prečnik jezgra (d) (mm)	12 (za 65-75 μm) / 25,4 (za 75-85 μm)

Pregrada za rolnu papira

Stavite pregradu za 58/60 mm rolnu papira kao što je prikazano na slici ispod.



Podešavanje datuma i vremena

U meniju "7. Datum i vreme" zadaje se datum i vreme na fiskalnom štampaču pomoću tastera BACK, gore, dole i FWD a potvrđuje se pritiskom na ENTER.

U normalnom radu, kada je štampač povezan na internet, vreme se sinhronizuje automatski sa vremenskim serverom na internetu.

Registracija na SUF-u

Nakon što je FP_700MX spojen na internet mora se izvršiti inicijalna konfiguracija u komunikaciji sa SUF-om. Ova inicijalizacija se automatski pokreće nakon povezivanja na internet.

Po uključanju vrši se međusobna autentifikacija SUF-a sa integrisanim LPFR-om, koga FP-700MX u daljem radu koristi. Ako LPFR iz nekog razloga nije funkcionalan (npr. nije umetnut BE), pojaviće se poruka o grešci i štampač će se isključiti.

U slučaju neuspešne inicijalizacije nije moguć rad sa štampačem.

Za rad nije neophodna stalna internet veza (do 5 dana, određeno „Zakonom o fiskalizaciji“).

PAŽNJA!

Za rad FP-700MX neophodan je BEZBEDNOSNI ELEMENT – Smart kartica.

Korisnik je u obavezi da obezbedi BE od Poreske uprave R.Srbije i njegovu ugradnju u LPFR !

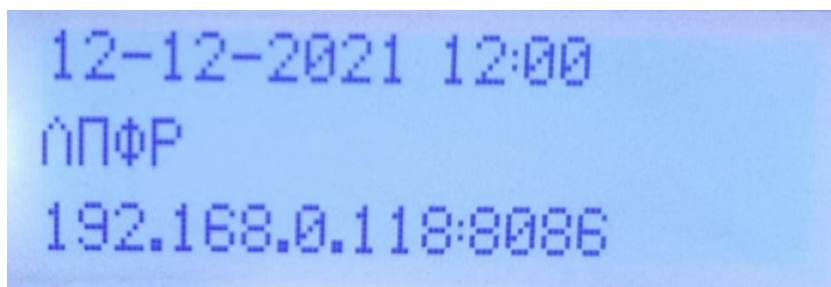
IZRIČITA PREPORUKA PROIZVOĐAČA JE DA OVU OPERACIJU IZVODI OVLAŠĆENI SERVIS JER OŠTEĆENJEM GARANCIJSKOG ŽIGA KUPAC GUBI PRAVO NA GARANCIJU I RIZIKUJE OŠTEĆENJE UREĐAJA.

Definicije iz „Zakona o fiskalizaciji“

- **SUF** – Sistem za upravljanje fiskalizacijom – server Poreske uprave
- **ESIR** - bilo koji softver ili hardver koji može izdavati fiskalne račune
- **V-PFR** (Virtualni procesor fiskalnih računa) - procesor računa u SUF-u
- **L-PFR** (Lokalni procesor fiskalnih računa) – procesor računa kod poreskog obveznika
- **BE** (bezbednosni element) – fiskalna komponenta dizajnirana da pruža skup funkcija: identifikovanje poreskog obveznika, potpisivanje računa digitalnim sertifikatom, kontrola isčitavanja i održavanje skupa fiskalnih računa – Smart kartica

Po uključanju štampač se nalazi u podrazumevanom režimu rada – Lokalni Procesor Fiskalnih Računa. Da bi funkcionisao u ovom režimu štampač mora biti povezan u lokalnu računarsku mrežu preko nekog od dostupnih mrežnih interfejsa – LAN ili WI-FI.

Nakon uspešnog povezivanja, na ekranu se pojavljuje IP adresa i port.



Kako odštampati fiskalni račun

Da bi FP-700MX odštampao fiskalni račun, iz korisničke POS aplikacije (ESIR) neophodno je kreirati HTTP zahtev i uputiti na IP adresu i port štampača.

Informacija: IP adresa i port su prikazani na displeju štampača !

Struktura zahteva prema štampaču FP-700MX data je u Prilogu 3 ovog uputstva.

Obrada zahteva sa ESIR-a

Korisnička POS aplikacija (ESIR) komunicira preko FP-700MX sa serverom Poreske uprave (SUF). Komunikacioni protokol između ESIR-a i FP-700MX je standardizovani HTTP protokol.

Zahtevi sa fiskalnim računima koje ESIR upućuje FP-700MX izvršavaju se po redu pristizanja, bez povratnog uticaja na rad ESIR-a.

JSON fajlovi moraju biti formatirani u skladu sa zahtevima propisanim u „Tehničkom vodiču“ Poreske uprave R.Srbije.

FP-700MX nakon pristizanja zahteva ESIR-a verifikuje strukturu primljenih podataka, obrađuje podatke – izračunava iznose poreza, formira paket za slanje ka bezbednosnom elementu, šalje ka BE prvo PIN kod, a nakon uspešno poslatog PIN koda zahtev za potpisivanje računa, prima povratne informacije sa BE i verifikacioni QR kod, a sve u skladu sa “Tehničkim vodičem”.

Pre nego ESIR-u vrati odgovor, FP-700MX obrađuje i enkriptuje svojim proizvoljnim AES -256 ključem fiskalne račune i čuva ih u *JID* folderu u internoj memoriji. Za svaki tip računa koje kreira ESIR (Promet, Avans, Kopija, Obuka i Predračun) FP-700MX kreira odgovarajući fajl -audit paket pod nazivom “JID-JID-Redni_broj.json”

Ukoliko neki od podataka nije u skladu sa ovim zahtevom LPFR će odbiti zahtev i ESIR-u vratiti opis sa kodom greške u skladu sa „Tehničkim vodičem“.

Najčešće greške u JSON fajlovima koje LPFR obrađuje:

- *Oznake poreskih stopa koje nisu validne za konkretnog poreskog obveznika*
- *Netačan datum i/ili vreme, tj. datum i vreme nisu usklađeni sa NTP serverom*

Pored kodova grešaka definisanih u Tehničkom vodiču, FP-700MX vraća i sopstvene specifične kodove grešaka:

```
8001 Paper cover is open
8002 No paper
8003 Device overheat
8004 Paper cutter error
8005 Device low power
9220 Certificate.CNMissing
9221 Certificate.PACMissing
9222 InvoiceAmount.Lower
9923 ExternalStorage.missing
9924 Auditfolder.missing
9925 Auditfolde.missing_or_full
9926 Error.ReadingCERT
9927 Error.DateElapsed
9928 SocketError
```

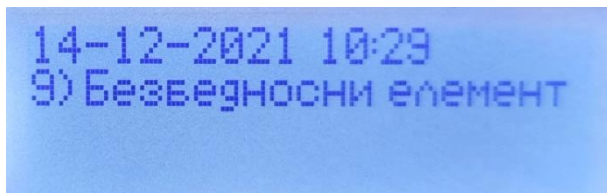
Na kraju ove procedure ESIR-u se prosleđuje odgovor (response) koji sadrži elemente neophodne za štampu fiskalnog računa: JID, datum i vreme, brojač računa, 2-slovnu oznaku tipa računa, oznake poreskih stopa sa vrednostima, verifikacioni URL, podatke o izdavaocu računa, proizvodjački kod-MRC i eventualno broj referentnog dokumenta, u skladu sa „Tehničkim vodičem“.

Bezbednosni element

Na Bezbednosnom elementu su zapisani (bez mogućnosti brisanje ili izmene) podaci o poreskom obvezniku koje LPFR koristi u svom radu: PIB, JID – jedinstveni identifikator, naziv poreskog obveznika, naziv prodajnog mesta, adresa, opština.

Prilikom komunikacije sa SUF-om kroz internet vezu, sertifikatom sa BE se od servera zahteva token za pristup API servisu SUF-a i dalje nastavlja komunikacija. Sve komande od SUF-a pristigle tokom komunikacije se izvršavaju automatski.

Izborom opcije “9.Bezbednosni element” vrši se testiranje komunikacije sa Bezbednosnim elementom i na traci štampa da li je test bio uspešan ili ne.



Internet isčitavanje

FP-700MX obavlja automatski prenos fajlova - AUDIT (isčitavanje) kad se detektuje internet veza. Ovaj prenos se obavlja u pozadini i dok traje isčitavnje FP-700MX je aktivan za prijem novih fiskalnih računa.

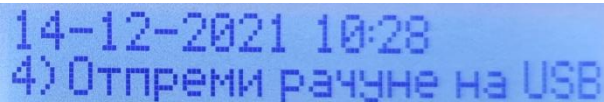
Prilikom internet isčitavanja, FP-700MX prvo šalje pakete za koje nema dokaza da su ranije poslali.

Promena smart kartice tokom isčitavanja neće zastaviti pokrenuto isčitavanje, bez obzira na tip isčitavanja !

Lokalno isčitavanje

U slučaju da FP-700MX ne može da se poveže na internet, a nakon 5 (pet) dana, korisnik je u obavezi da izvrši ručni prenos računa na SUF.

Izborom opcije "4. Otpremi račune na USB" vrši se prenos svih neposlatih računa sa kase na USB flash.



14-12-2021 10:28
4) ОТПРЕМИ РАЧУНЕ НА USB

Na spoljnoj memoriji biće automatski kreiran folder sa nazivom *JID*. U ovom folderu se čuvaju računi, tzv. Audit paketi, koji se prenose na server Poreske uprave. U ovom folderu se, pored enkriptovanih fiskalnih računa, nalazi *JID*.ARP fajl koji sadrži podatke vezane za pokretanje Audita. Na memoriji kapaciteta 1 GB može da stane preko 25000 fiskalnih računa. Korisniku je ZABRANJENO brisanje ili izmena ovih fajlova – brisanje će FP-700MX automatski sprovesti nakon dobijanja „Dokaza o isčitavanju“ sa SUF-a i upisivanja istog na bezbednosni element.

PAŽNJA!

Potrebna je USB flesh memorija koji korisnik mora sam obezbediti !

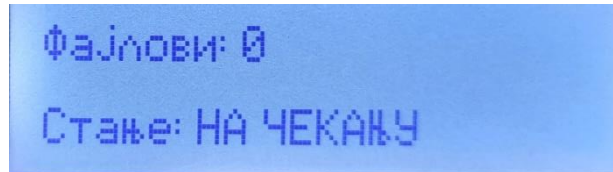
Poželjno je da se koristi samo za ove svrhe i da je formatirana u FAT32 formatu.

Povezivanje na štampač se vrši preko "USB B female-USB A female" kabla koji se isporučuje uz štampač !

Nakon ovog prenosa, korisnik treba da pristupi svojim sertifikatom na web-portal Poreske uprave i tamo učita prenete fajlove sa USB flesh memorije.

Status LPFR-a

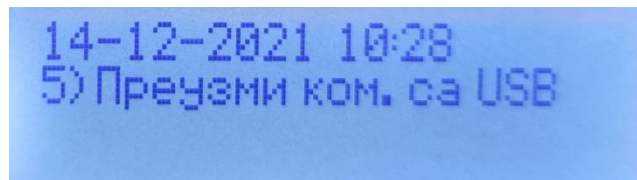
U svakom momentu operater može proveriti status, tj. da li ima neprenetih računa na SUF. Izborom opcije "3. Status" (ili pritiskom na taster Δ) na displeju se prikazuje:



FP-700MX će na displeju prikazati koliko ima neposlatih računa na SUF i da li je prenos možda u toku. Nakon izlaska na taster BACK na traci će biti odštampan detaljan status LPFR-a: "LPFR spreman", Popunjenost memorije za isčitavanje, Oznake i vrednosti poreskih stopa, NTP server i Verifikacioni URL.

Preuzimanje komandi i prenos statusa izvršenih komandi

U slučaju da kasa ne može da se poveže na internet duže od 5 dana, korisnik je u obavezi da ručno izvrši preuzimanje komandi. Potrebno je da pristupi svojim sertifikatom na web-portal Poreske uprave i tamo preuzme fajl sa komandama, snimi ga u root-u USB flash memorije gde se nalazi *JID* folder, a zatim tu USB flash memoriju priključi na FP-700MX pomoću priloženog kabla. Na štampaču treba izabrati opciju "5. Preuzmi komande sa USB" i potvrditi na ENTER.



Nakon izvršavanje preuzetih komandi sa USB flesh memorije, štampač će na nju otpremiti statuse izvršenih komandi. Korisnik je u obavezi da ove statuse ručno učitava na svom web-portalu Poreske uprave, kao dokaz uspešnog izvršavanja na FP-700MX.

Dnevnik grešaka (LOG fajl)

LPFR u svom radu beleži sve događaje i generiše LOG zapis koji sadrži opis događaja i status izvršavanja, sa datum i vremenom nastanka.

Ovaj fajl se može preneti na USB flash memoriju u TXT formatu ili isčitati iz printera u aplikaciji "Test FP-700".

LOG zapise FP-700MX čuva 30 dana, nakon čega se najstariji zapisi prepisuju novim.

Aktuelne stope poreza

Izborom opcije "3. Status" (ili pritiskom na taster Δ) a zatim pritiskom na taster BACK, na traci će biti odštampane oznake i vrednosti aktuelnih poreskih stopa za korisnika čiji Bezbednosni element FP-700MX koristi.

Ove oznake i vrednosti poreskih stopa FP-700MX preuzima u postupku inicijalizacije sa SUF-om i/ili izvršavanjem komandi sa SUF-a, bilo automatski ili ručno. Datum od kada važe poreske grupe može biti i u budućnosti.

Korisnički ESIR ove podatke dobija komandom STATUS i mora ih koristiti u procesu kreiranja računa.

Ako ESIR šalje zahteve sa oznakama poreskim stopa koje nisu važeće u momentu slanja, ovi zahtevi biće odbijeni od strane FP-700MX sa odgovarajućim kodom greške.

Ako se koriste validne oznake-labela poreskih stopa, tada se na svaki pojedinačni artikal na fiskalnom računu primenjuje poreska stopa naznačena za taj artikal, a iznosi se zaokružuju na 4 decimale, u skladu sa „Tehničkim vodičem“.

7

Rešavanje problema

INT RASTER FP-700 MX

Ako imate problema sa štampanjem, pogledajte donju tabelu za moguće uzroke:

№	Problem	Mogući uzroci
1.	Izlazi prazan, neodštampan papir nakon zadavanje komandi za štampu	<p>Termalni papir je posebno premazan sa spoljašnje strane rolne. Uklonite rolnu papira i ponovo pravilno ubacite.</p> <p>Pogledajte odeljak „Umetanje papira“ za detalje.</p>
		<p>Poklopac papira nije spušten do kraja.</p> <p>Pogledajte odeljak „Umetanje papira“ za detalje.</p>
2.	<p>Na displeju štampača xxxx.xxxx.xxxx.xxxx umesto IP adrese</p>	<p>Štampač nema internet konekciju.</p> <p>Mogući uzroci: loš kontakt mrežnog kabla, prekid kabla, prekid na strani internet provajdera/rutera</p>
3.	Štampač se ne uključuje	<p>Nema AC napajanja</p> <p>Taster neispravan</p> <p>Kvar štampača</p>

PAŽNJA!

Za rad FP-700MX neophodan je BEZBEDNOSNI ELEMENT – Smart kartica.

Korisnik je u obavezi da obezbedi BE od Poreske uprave R.Srbije i njegovu ugradnju u LPFR !

IZRIČITA PREPORUKA PROIZVOĐAČA JE DA OVU OPERACIJU IZVODI OVLAŠĆENI SERVIS JER OŠTEĆENJEM GARANCIJSKOG ŽIGA KUPAC GUBI PRAVO NA GARANCIJU I RIZIKUJE OŠTEĆENJE UREĐAJA.

- Isključite štampač iz napajanja i otvorite poklopac
- Odvrtanjem 2 zavrtnja na poklopcu i 4 zavrtnja ispod poklopca podignite kućište štampača
- Unutar štampača - na matičnoj ploči se nalazi slot za BEZBEDNOSNI ELEMENT.
- Bezbednosni element – smart karticu SIM formata veličine, potrebno je ubaciti u ovaj slot, sa kontaktima okrenutim nadole.
- Vratite gornji poklopac, kućište i zavrtnje, zatim uključite štampač.
- U slučaju da BE nije pravilno postavljen na displeju se ispisuje poruka “BE Nije pronadjen!” i dalji rad sa štampačem nije moguć

INT RASTER FP-700 MX

Dobavljač: INT RASTER DOO
Adresa: Toše Jovanovića 11, 11030 Beograd, Srbija
PIB: 103198263
Kontakt: www.intraster.rs

Brzi vodič – fiskalni račun u 4 koraka

1. Verify PIN
2. Get Environment Parameters
3. Get Status
4. Create Invoice

Na početku rada sa FP-700MX potrebno je izvršiti komande “Verify PIN”, “Get Environment Parameters” i “Get status”, kako bi preuzeli neophodne inicijalne podatke za konkretnog korisnika (poreske stope, server za sinhronizaciju vremena i sl.)

Kreiranje i štampanje računa se nadalje radi komandom “Invoice”.

Dalji opis biće na engleskom jeziku zbog lakšeg prilagođavanja različitim programskim jezicima u kojima su korisničke aplikacije napisane.

1. Verify PIN

This service is used to verify a PIN entered by a cashier on a POS. Once the PIN is entered, it is validated using the Secure element on a smart card. The request is sent as plain text and the response is plain text (still application/json HTTP header must be provided).

If the command is successfully executed and the PIN is correct, E-SDC shall return "0100" and remember this PIN in its volatile memory (RAM) for all subsequent operations, until the smart card is removed from the reader or the E-SDC is switched off. Therefore there is no need for POS to send a PIN before every operation, only once it receives the response "0100".

However, if POS receives the error code "1500" during its regular operation, it must use this service again to provide a valid PIN (ask the user for the PIN or other way as per the POS internal policy). This case can be due to a card being removed, a card reader or E-SDC malfunctioning, etc.

In order to verify PIN, E-SDC invokes [Pin Verify](#) APDU command and passes PIN to the Secure element.

Endpoint

Endpoint	Example
<code>http://<ESDC_ip_address>:<ESDC_port>/api/v3/pin</code>	<code>http://192.168.88.112:8888/api/v3/pin</code>

Method

POST

Header

Add following HTTP headers to each request

- `Accept: application/json`
- `Content-Type: application/json`

Authentication

FP-700MX does not require client authentication.

Request

String with PIN code sent from POS. PIN can contain only 4 ASCII digits 0-9.

Example

1234

Response Data

A string representation of one of the general [Status and Error Codes](#):

- "0100" - command executed successfully and PIN is correct for the inserted card;
- "2100" - PIN code is wrong for the inserted card. Secure element responded with 0x6302 or 0x6303;
- "2110" - The number of allowed PIN entries exceeded. The card is locked for further use and has to be returned to Tax Office. Secure element responded with 0x6310;
- "1300" - E-SDC detects that the smart card is not inserted (or E-SDC fails to connect to it due to card or card reader issues or some other internal malfunction);
- "2220" - E-SDC cannot connect to the Secure Element applet;
- "2400" - SDC device is not fully configured for invoice signing (i.e. tax rates or verification URL are missing etc.)
- "2806" - If provided PIN is in invalid format, other than ASCII digits 0-9.
- "1999" - E-SDC could not verify PIN, but specific case reason is not determined by error codes. Field *message* may contain more description. Manufacturer can use manufacturer-specific codes to describe warning in more details.

For more information consult [Status and Error Codes](#) sections.

Example

"0100"

2. Get Environment Parameters

Endpoint	Example
<code>http://<ESDC_ip_address>:<ESDC_port>/api/v3/environment-parameters</code>	<code>http://192.168.88.112:8888/api/v3/environment-parameters</code>

HTTP Method

GET

Header

Add following HTTP headers to each request

- `Accept: application/json`

Authentication

FP-700MX does not require client authentication.

Response

Field	Description
<code>organizationName</code>	Name of the tax authority organization
<code>serverTimeZone</code>	Time zone of the server location
<code>street</code>	Tax authority street address
<code>city</code>	Tax authority city
<code>country</code>	Tax authority country
<code>endpoints</code>	List of available endpoints
<code>environmentName</code>	Name of the environment
<code>logo</code>	Link to the tax authority's official logo
<code>ntpServer</code>	NTP server used for time synchronization
<code>supportedLanguages</code>	Supported language(s) for the environment

Example:

```
{
  "organizationName": "Министарство финансија - Пореска управа - Централa",
  "serverTimeZone": "Central Europe Standard Time",
  "street": "Саве Машковића 3-5",
  "city": "Београд",
  "country": "RS",
  "endpoints": {
    "taxpayerAdminPortal": "https://tap.sandbox.suf.purs.gov.rs:443/",
    "taxCoreApi": "https://api.sandbox.suf.purs.gov.rs:443/",
    "vsdc": "https://vsdc.sandbox.suf.purs.gov.rs:443/",
    "root": "https://sandbox.suf.purs.gov.rs:443/v/?v1="
  },
  "environmentName": "СУФ Развој",
  "logo": "https://sandbox.suf.purs.gov.rs:443/DownloadContent/TALogo.png",
  "ntpServer": "http://0.pool.ntp.org:80/",
  "supportedLanguages": [
    "sr-Cyrl-RS",
    "en-US"
  ]
}
```

3. Get Status

Endpoint	Example
<a href="http://<E-SDC_ip_address>:<E-SDC_port>/api/v3/status">http://<E-SDC_ip_address>:<E-SDC_port>/api/v3/status	http://192.168.88.112:8888/api/v3/status

Method

GET

Header

Add following HTTP headers to each request

- **Accept:** *application/json*

Authentication

FP_700MX does not require client authentication.

Request

N/A

Response

JSON formatted data in accordance with the below table.

Field	Description	Example
isPinRequired	If PIN is not entered, or if a wrong PIN is entered in the previous attempt, this field shall be set to true; otherwise set to false	true
auditRequired	If Audit is required, this field shall be set to true. Audit is required if the Total Amount of all invoices is 75% or more of the Maximum Limit. Maximum Limit and Total Amount are obtained from the Secure element using Amount Status APDU command	False if Total Amount is 1554879 Maximum Limit is 9000000 True If Total Amount is 7504899 Maximum Limit is 10000000
sdcdatetime	Current Local Date and Time in ISO 8601 format	2017-08-30T11:53:05+13:00
lastInvoiceNumber	Invoice number of the last invoice signed by this E-SDC.	ORG674J1-ORG674J1-98637
protocolVersion	Always return 1.0.0.0	1.0.0.0
secureElementVersion	Version obtained from the Secure element using Get Secure Element Version APDU command	1.1.1
hardwareVersion	Manufacturer-specific hardware version, if applicable	1.2.7.21
softwareVersion	Manufacturer-specific software version	1.7.6.5
deviceSerialNumber	Manufacturer-specific serial number of the E-SDC device in format of the Manufacturer Registration Code - MRC	08-0012-ASDJKA1SDJL2A
make	Name of the manufacturer	Acme
model	Manufacturer-specific Model Name	The Device 442
mssc	Manufacturer-specific Errors, Warnings and info messages	Array of error codes
gsc	General Errors, Warnings and info messages defined in the Status and Error Codes section	Array of error codes
supportedLanguages	List of language-culture strings supported by SDC and intercepted with languages supported	en-US; sr-Cyrl-RS

Field	Description	Example
	by specific environment, as per Get Environment Parameters	
uid	UID of the client certificate (V-SDC) or inserted smart card (E-SDC)	TK7SV2AY
taxCoreApi	Root URL of the TaxCore.API targeted by SDC	https://api.sandbox.taxcore.dti.rs:443/
currentTaxRates	An object of currently active tax rates	An object containing validFrom date, group Id and the array of currently active tax categories
allTaxRates	An array of all tax rates	An array containing validFrom date, group Id and tax categories for each group

Model

```

GetStatusResponse {
  sdcDateTime (string, optional),
  supportedLanguages (Array[string], optional),
  uid (string, optional),
  taxCoreApi (string, optional),
  currentTaxRates (TaxRateGroup, optional),
  allTaxRates (Array[TaxRateGroup], optional)
}

```

Example:

```

{
  "isPinRequired":true,
  "auditRequired":false,
  "sdcDateTime":"2021-12-16T07:10:07.000",
  "lastInvoiceNumber":"U7LRVVMK-U7LRVVMK-2",
  "protocolVersion":"1.0.0.0",
  "hardwareVersion":"1.0.0.0",
  "secureElementVersion":"1.1.0",
  "softwareVersion":"1.0",
  "mssc":[
    "8001 Paper cover is open",
    "8002 No paper",
    "8003 Device overheat",
    "8004 Paper cutter error",
    "8005 Device low power",
    "9220 Certificate.CNMissing",
    "9221 Certificate.PACMissing",
    "9222 InvoiceAmount.Lower",
    "9923 ExternalStorage.missing",
    "9924 Auditfolder.missing",
    "9925 Auditfolde.missing_or_full",
    "9926 Error.ReadingCERT",
    "9927 Error.DateElapsed",
    "9928 SocketError"
  ],
  "gsc":[
    "1500",
    "0210"
  ],
  "deviceSerialNumber":"10-0001-FP-700MX_000068",
  "make":"INT RASTER",
  "model":"FP-700MX",
  "supportedLanguages":[
    "sr-Cyrl-RS"
  ],
}

```

```
"uid": "U7LRVVMK",
"taxCoreApi": "https://api.sandbox.suf.purs.gov.rs:443/"
```

```
"currentTaxRates": {
  "validFrom": "2020-08-03T12:56:56",
  "groupId": 2,
  "taxCategories": [
    {
      "name": "ECAL",
      "categoryType": 0,
      "taxRates": [
        {
          "rate": 5,
          "label": "D"
        },
        {
          "rate": 11,
          "label": "F"
        }
      ],
      "orderId": 1
    },
    {
      "name": "N-TAX",
      "categoryType": 0,
      "taxRates": [
        {
          "rate": 0,
          "label": "N"
        }
      ],
      "orderId": 2
    },
  ],
}
```

4. Create and print Invoice

Endpoint	Example
http://<ESDC_ip_address>:<ESDC_port>/api/v3/invoices	http://192.168.88.112:8086/api/v3/invoices

Method

POST

Authentication

FP-700MX does not require client authentication.

Request

Headers

Add following HTTP headers to each request

- **Accept:** application/json
- **Content-Type:** application/json
- **RequestId:** <RequestId_value> (Unique identifier of the request, generated by POS system. It is used only for later request search, in case a response was not received. - **optional**)
- **Accept-Language:** <Accept-Language_value> (The list of one or more languages returned through the field **supportedLanguages** in the [Get Status](#) service response, ordered in POS language preference and separated by semi-colon.)
 - SDC returns Invoice Result in the first supported language from the list
 - if none of the languages from the list are supported by SDC, the SDC returns HTTP status code 406
 - if POs does not submit this parameter, SDC returns Invoice Result in the first language from the list obtained through Get Status service

Invoice

Field	Optional/ Mandatory	Description
dateAndTimeOfIssue	Optional	Current Local Date and Time in ISO 8601 format. This is an optional element on the API level. However, tax legislation in certain jurisdictions might mandate including it on invoices - so make sure you become familiarized with the requirements in each jurisdiction.
invoiceType	Mandatory	Invoice Type enumeration value: 0 - Normal, 1 - Proforma, 2 - Copy, 3 - Training, 4 - Advance
transactionType	Mandatory	Transaction Type enumeration value: 0 - Sale, 1 - Refund
payment	Mandatory	List of Payments for the invoice, where each Payment defines it's method and amount
cashier	Optional	Cashier's identification.
buyerId	Optional	Unique identification of the buyer/customer. It is mandatory only if there is a legal obligation for buyer identification (in both B2C and B2B transactions); otherwise, it's optional.
buyerCostCenterId	Optional	Cost Center ID provided by the buyer to the cashier or an identification of the invoice purpose. It is mandatory only if there is a legal obligation for invoice purpose identification (in both B2C and B2B transactions); otherwise, it's optional.

Field	Optional/ Mandatory	Description
invoiceNumber	Optional	Invoice number generated by a POS or the software version of the accredited POS. This is an optional element on the API level. However, tax legislation in certain jurisdictions might mandate including it on invoices. Make sure you become familiarized with specific jurisdiction requirements regarding its use and content.
referentDocumentNumber	Mandatory for all Copies and Refunds and some Normal Sale or Advance Sale invoices	Mandatory only in case Invoice Type is Refund, Copy or Advance Sale connected to an Advance Sale (other jurisdiction-specific rules may apply). In all cases, this field must contain Invoice Number of the previously issued invoice. In any other case this field is optional. ASCII, in the requestedBy-signedBy-Ordinal_Number format. Unicode MaxLength: 50
referentDocumentDT	Optional	SDC date and time of the document referenced in the referentDocumentNumber field. It is used to calculate taxes on the date of issue of the original document that is refunded or copied. If it is not provided in the request, SDC uses the currently active tax rates.
items (n)	Mandatory	Each invoice contains at least one Item in Items collection (E-SDC should support minimum 250, recommended up to 500)
options	Optional	Key/value collection defines the output of E-SDC invoice fiscalization, to optimize resources. Key: omitQRCodeGen Value: "1" to omit QR Code generation by E-SDC and "0" to generate and return QR code to POS. Key: omitTextualRepresentation Value: "1" to omit generation of textual representation by E-SDC and "0" to generate return textual representation to POS.

Item

Each Item represents one line item on the invoice.

Field	Optional/ Mandatory	Description
gtin	Optional	Global Trade Item Number (GTIN) is an identifier for trade items, incorporated the ISBN, ISSN, ISMN, IAN (which includes the European Article Number and Japanese Article Number) and some Universal Product Codes, into a universal number space.
name	Mandatory	Human-readable name of the product or service.
quantity	Mandatory	The quantity of an item, with a maximum of 3 decimals. Example: 2 (pieces), 0.100 (grams).
unitPrice	Mandatory	Unit price of the line item. It does not take part in tax calculation.
Labels	Mandatory	The array of labels. Each Label represents one of the Tax Rates applied on the invoice item. Tax Items are calculated based on totalAmount and applied labels as described in the Calculate Taxes section. This field is mandatory (i.e. the caller must submit a non-empty collection) for each item, even when the price is 0.00.
totalAmount	Mandatory	Gross price for the line item.

Payment

Field	Optional/Mandatory	Description
amount	Mandatory	Decimal amount of the payment
paymentType	Mandatory	Payment Type enumeration value: 0 - Other, 1 - Cash, 2 - Card, 3 - Check, 4 - Wire Transfer, 5 - Voucher, 6 - Mobile Money

Model

```
InvoiceRequest {
  dateAndTimeOfIssue (string, optional),
  cashier (string) Unicode MaxLength:50,
  buyerId (string, optional) ASCII MaxLength:20,
  buyerCostCenterId (string, optional) Unicode MaxLength:50,
  invoiceType (string) = ['Normal', 'ProForma', 'Copy', 'Training', 'Advance'] (int) =
  [0,1,2,3,4],
  transactionType (string) = ['Sale', 'Refund'] (int) = [0,1],
  payment (Array[Payment]),
  invoiceNumber (string, optional) Unicode MaxLength:60,
  referentDocumentNumber (string, optional),
  referentDocumentDT (string, optional),
  options (inline_model, optional),
  items (Array[Item])
}
Payment {
  amount (number),
  paymentType (string) = ['Other', 'Cash', 'Card', 'Check', 'WireTransfer', 'Voucher',
'MobileMoney'] (int) = [0,1,2,3,4,5,6]
}
inline_model {
omitQRCodeGen (string, optional) = ["0", "1"],
omitTextualRepresentation (string, optional) = ["0", "1"]
}
Item {
  gtin (string, optional) MinLength:8 MaxLength:14,
  name (string) Unicode MaxLength:2048,
  quantity (number) Decimal(14,3) MinValue:0.001,
  labels (Array[string]) MinLength:1,
  unitPrice (number) Decimal(14,2),
  totalAmount (number) Decimal(14,2)
}
```

Response

Headers

The following HTTP headers shall be returned in response

- **RequestId:** <RequestId from Request HTTP Headers>

Data Fields

Field	Description
requestedBy	UID of client's Secure Element digital certificate.
signedBy	UID of SDC's Secure Element digital certificate.
sdcDateTime	Local date and time in ISO 8601 format provided by E-SDC.
invoiceCounter	Invoice Counter in format transactionTypeCounter/totalCounter invoiceCounterExtension For Example: 14/17NS

Field	Description
invoiceCounterExtension	First letters of Invoice Type and Transaction Type of the invoice. NS for Normal Sale, CR – Copy Refund, TS – Training Sale, etc.
invoiceNumber	SDC Invoice Number in format requestedBy-signedBy-totalCounter
verificationUrl	VerificationURL generated in the <i>Create Verification URL</i> process
verificationQRCode	Base64 encoded byte array of GIF image created in the Create QR Code process
journal	Textual Representation of the invoice created in the <i>Create a Textual Representation of an Invoice (Receipt)</i> process
totalCounter	Total number of invoices signed by Secure Element. Returned by <i>Sign Invoice</i> APDU command
transactionTypeCounter	Total number of invoices for a requested type. Returned by <i>Sign Invoice</i> APDU command
totalAmount	Sum of all Items – total payable by the customer
encryptedInternalData	Base64 encoded byte array returned by <i>Sign Invoice</i> APDU command
signature	Base64 encoded byte array returned by <i>Sign Invoice</i> APDU command
taxItems	Array of TaxItem entities
businessName	Taxpayer Business Name obtained from digital certificate subject field
locationName	Location Name obtained from digital certificate subject field
address	Street address obtained from digital certificate subject field
tin	Tax Identification Number obtained from digital certificate subject field
district	District obtained from digital certificate subject field
taxGroupRevision	Revision of taxes used in the calculation
mrc	Manufacturer Registration Code is mandatory for audit package sent to the tax authority database, but it's optional for invoice response sent to POS. It always has the format MakeCode-SoftwareVersionCode-DeviceSerialNumber . Explanation: MakeCode -unique 2 characters received from the tax authority during accreditation. SoftwareVersionCode - unique 4 characters received from the tax authority during accreditation. DeviceSerialNumber - manufacturer serial number (max 32 characters) for each E-SDC installation. All 3 elements of MRC are mandatory.
messages (optional)	Custom human-readable message that shall be printed or displayed by POS.

TaxItem

TaxItem represents tax liability on the invoice per one tax category.

Field	Description
label	Tax Label (A, F, G, N, P...)
categoryName	Tax Category Name (e.g. VAT, Consumption)
categoryType	Tax Category Type (0 - Tax on net, 1 - Tax on total, 2 - Amount per quantity)
rate	Tax rate percentage for Label (i.e. 12.50%)
amount	Tax amount calculated by E-SDC during invoice fiscalization

Model

```
InvoiceResult {
  requestedBy (string, optional),
  sdcDateTime (string),
  invoiceCounter (string, read only),
  invoiceCounterExtension (string, optional),
  invoiceNumber (string, read only),
  taxItems (Array[TaxItem], optional),
  verificationUrl (string, optional),
  verificationQRCode (string, optional),
  journal (string, optional),
  messages (string, optional),
  signedBy (string),
  encryptedInternalData (string),
  signature (string, optional),
  totalCounter (integer, optional),
  transactionTypeCounter (integer, optional),
  totalAmount (number, optional),
  taxGroupRevision (integer, optional),
  businessName (string, optional),
  tin (string, optional),
  locationName (string, optional),
  address (string, optional),
  district (string, optional),
  mrc (string, optional)
}
TaxItem {
  categoryType (integer, optional),
  label (string),
  amount (number),
  rate (number),
  categoryName (string)
}
```

1. [Normal Sale](#)

This is an example of Normal Sale Invoice

Request

Header

RequestId: 4c5730b50eb7b50e7a0292600a67ce16

Body

```
{
  "dateAndTimeOfIssue": "2020-12-08T08:55:23.286Z",
  "cashier": "123456789",
  "buyerId": "RS34564565",
  "buyerCostCenterId": "567546",
  "invoiceType": "Normal",
  "transactionType": "Sale",
  "payment": [
    {
      "amount": 70.00,
      "paymentType": "Cash"
    }
  ],
  "invoiceNumber": "POS2017/998",
  "referentDocumentNumber": "",
  "options": {
    "omitQRCodeGen": "1",
    "omitTextualRepresentation": "0"
  },
  "items": [
    {
      "name": "Sport-100 Helmet, Blue",
      "quantity": 2,
      "unitPrice": 34.23,
      "labels": [
        "A"
      ],
      "totalAmount": 68.46
    }
  ]
}
```

Response

Header

RequestId: 4c5730b50eb7b50e7a0292600a67ce16

Body

```
{
  "requestedBy": "WHKV8WJH",
  "sdcDateTime": "2020-12-09T01:51:43.1847161+12:00",
  "invoiceCounter": "6/16NS",
  "invoiceCounterExtension": "NS",
  "invoiceNumber": "WHKV8WJH-GFB38T00-16",
  "taxItems": [
    {
      "categoryType": 0,
      "label": "A",
      "amount": 5.6527,
      "rate": 9,
      "categoryName": "VAT"
    }
  ],
}
```



```

"verificationUrl":
"https://frontendui.test.taxcore.dti.rs/v/?vl=AldIS1Y4V0pIR0ZCMzhUTzAQAAAABgAAADhyCgAAAAAAAAABdkKfR1A
AAABqij704IyBt75rU5DJ4m3jgOpsTwrIGH1%2BPj2xpA2vddwxGAfP4gTWhqCZ5upW5yMziBUIa%2FzbVUHbtAHDeevopB2Spjn
51Or97ZXWzG7Jai8G%2B%2Fu74X2481KY5%2BYJ4ABtFEhCaQNgN4QXU%2FU2DpLsuyjOiaz8AoZFLaReEBiZFiMwrtUtZtTioQn7
pQB6u%2FH2bYWaTGXq5sJ07vRLK9r99YIyvweCgPLmnmOuzz363mA3T1PX%2Bov49x869TIC%2BACsqCW5SzlZax0n1NBheSNXD7v
w03p7K%2BgBs31NsrBwBx4DdEAN3YMq2%2F6db2j9tiu6Vkf09WMxIsBtXIyVP6kYE6eOSCgZaz%2FeCVzeLQHvD02zWBBE0xFnQh
FRiY1jNmaEbHi%2B7j910%2FvXd47ui6qvKtYp%2BpahbbRZULW9kmqxyxbIzxdNxH1tOPFKx8A5smljVvc1Hn8Iu6bt2IRnEesp
nmjha81okRxs1V2eTicw%2FU3%2B9P9GC236XAVjLURtJDiHS3RB58tyWgyBi10TI7p8xKfcN7JH%2B%2FJ%2FyIM6%2Bn9UCzMcw
yMddwTcun%2BTofbn747so2onz2ZADSROyJfaEWgzI7GwrjrEx6YwGba4HtzwP4aqH8DWIdiuI6ziC4jnvZN8jvwK9JNBmz9YA1c6
%2BmlloiXxvhBcGlCYRwb16oLg%3D%3D",
"verificationQRCode": null,
"journal": "===== FISCAL INVOICE =====\r\n
TIN:                HlHKLlKJ\r\n
Company:            Fiskalizacija doo\r\n
Store:              Fiskalizacija doo\r\n
Address:            Milinka Milinkovica 44\r\n
District:           Vinca\r\n
Cashier TIN:        123456789\r\n
POS Number:         POS2017/998\r\n
POS Time:           08/12/2020 08:55:23\r\n
-----NORMAL SALE-----\r\n
Items\r\n
=====
Name      Price      Qty.      Total\r\n
Sport-100 Helmet, Blue (A)      \r\n
          34.23          2          68.46\r\n
-----
Total Purchase:                68.46\r\n
-----
Cash:                            70.00\r\n
=====
Label      Name      Rate      Tax\r\n
A          VAT      9.00%     5.65\r\n
-----
Total Tax:                5.65\r\n
=====
SDC Time:           09/12/2020 01:51:43\r\n
SDC Invoice No:     WHKV8WJH-GFB38T00-16\r\n
Invoice Counter:   6/16NS\r\n
=====
===== END OF FISCAL INVOICE =====\r\n",
"messages": "Success",
"signedBy": "GFB38T00",
"encryptedInternalData":
"aoo+90CMgbe+a10QyeJt44DqbE8KyBh9fj49saQNr3XcMRgHz+IE1oagmebqVucjM4gVCGv821VIW7QBw3nr6KQdkqY4J+ZTq/e2
V1sxuyWovBvv7u+F9uPJSmOfmCeAAbRRIQmkDYDeEF1P1Ng6S7Lsozoms/AKGRS2kXhAYmRYjFq7VLWbU4qEJ+6UAervx9m2Fmkx1
6ubCTu70Syva/fWCMr8HgoDy5p5jrs89+t5gN05T1/qL+PcfOvUyAvgArKgluUusy2WsdJ5TQYXkjVw+78NN6eyvoAbN9TbkWcAceA
3RADd2DKtv+nW9o/bYrulZH9PVjMSLabVyMIT+pA==",
"signature":
"YE6eOSCgZaz/eCVzeLQHvD02zWBBE0xFnQhFRiY1jNmaEbHi+7j910/vXd47ui6qvKtYp+pahbbRZULW9kmqxyxbIzxdNxH1tOP
FKx8A5smljVvc1Hn8Iu6bt2IRnEespnmjha81okRxs1V2eTicw/U3+9P9GC236XAVjLURtJDiHS3RB58tyWgyBi10TI7p8xKfcN7J
H+/J/yIM6+n9UCzMcwyMddwTcun+Tofbn747so2onz2ZADSROyJfaEWgzI7GwrjrEx6YwGba4HtzwP4aqH8DWIdiuI6ziC4jnvZN8
jvwK9JNBmz9YA1c6+mlloiXxvhBcGlCYRwb16oLg==",
"totalCounter": 16,
"transactionTypeCounter": 6,
"totalAmount": 68.46,
"taxGroupRevision": 2,
"businessName": "Shtelovanje doo",
"tin": "HlHKLlKJ",
"locationName": "Shtelovanje doo",
"address": "Milinka Milinkovica 44",
"address": "Vinca",
"mrc": "99-0100-GFB38T00"
}

```

```

"request": {
  "dateAndTimeOfIssue": "2021-09-02T14:45:59",
  "cashier": "1",
  "buyerId": "987654321",
  "buyerCostCenterId": "099999999",
  "invoiceType": 0,
  "transactionType": 1,
  "payment": [
    {
      "amount": 5.0,
      "paymentType": 2
    },
    {
      "amount": 20.0,
      "paymentType": 1
    }
  ],
  "invoiceNumber": "07-2021-3",
  "referentDocumentNumber": "BQVWAAR4-BQVWAAR4-23",
  "referentDocumentDT": "2021-09-02T13:45:29",
  "options": {
    "omitTextualRepresentation": "0",
    "omitQRCodeGen": "1"
  },
  "items": [
    {
      "gtin": "987654321",
      "name": "Mate 20 Lite",
      "quantity": 2.0,
      "discount": null,
      "labels": [
        "A",
      ],
      "unitPrice": 10.0,
      "totalAmount": 20.0
    },
    {
      "gtin": "987654321",
      "name": "Credit",
      "quantity": 1.0,
      "discount": null,
      "labels": [
        "A"
      ],
      "unitPrice": 5.0,
      "totalAmount": 5.0
    }
  ]
}
}

```

Premier League DTI
Store 3
1200 Willow Road


Cashier: 1
Buyer: 987654321
Buyer Cost center: 099999999
POS Number: 07-2021-3
POS Time: 02/09/2021 14:45:59
Ref No: BQVWAAR4-BQVWAAR4-23
Ref DT: 2021-09-02T13:45:29

----- NORMAL REFUND -----

Name	Price	Qty.	Total
Mate 20 Lite (A, B)	10.00	2	-20.00
Credit (A)	5.00	1	-5.00
Total Refund:			25.00
Card:			5.00
Cash:			20.00

Label	Name	Rate	Tax
A	VAT	9.00%	2.06
B	VAT	0.00%	0.00
Total Tax:			2.06

SDC Time: 02/09/2021 14:46:00
SDC Invoice No: BQVWAAR4-BQVWAAR4-27
Invoice counter: 4/27NR



===== END OF FISCAL INVOICE =====

The following examples :

2. [Normal Refund](#)
This is an example of Normal Refund
3. [Advance Sale](#)
This is an example of Advance Sale Invoice
4. [Advance Refund](#)
This is an example of Advance Refund.
5. [Copy Sale](#)
This is an example of Copy Sale
6. [Copy Refund](#)
This is an example of Copy Refund
7. [Proforma Sale](#)
This is an example of Proforma Sale
8. [Proforma Refund](#)
This is an example of Proforma Refund
9. [Training Sale](#)
This is an example of Training Sale
10. [Training Refund](#)
This is an example of Training Refund

you can find here:

<https://tap.sandbox.suf.purs.gov.rs/Help/view/1672078854/Create-Invoice/en-US>

Isključivanje / uključivanje automatske štampe fiskalnog računa

Method: **POST**

URL: **"/api/datecs/post_settings"**

Primer JSON:

```
{
  "auto_print": 1
}
```

Parametar (body):

1, "1" or "true" → uključi auto-print fiskalnog računa (String or Int)

0, "0" or "false" → isključi auto-print fiskalnog računa (String or Int)

Štampanje slobodnog teksta

Method: **POST**

URL: **"/api/datecs/post_free_text"**

Primer JSON:

```
{
  "text":
  "===== ФИСКАЛНИ РАЧУН =====\r\n
    103198263 \r\n
    INT RASTER D.O.O. \r\n
    INT RASTER D.O.O. \r\n
    Тоше Јовановића 11 \r\n
    Београд \r\n
    Чукарица \r\n
Касир: Vladan\r\n
ЕСИР број: 129/1.0\r\n
ИД купца: 57657656\r\n
Опционо поље купца: Т-657656\r\n
----- ПРОМЕТ ПРОДАЈА -----\r\n
Артикли \r\n
===== \r\n
Назив Цена Кол. Укупно\r\n
Coca Cola 2 lit. PVC (A) /ком \r\n
120.00 2 240.00\r\n
-----\r\n
За уплату: 240.00\r\n
Готовина: 100.00\r\n
Платна картица 200.00\r\n
```

```

Повраћај:                60.00\r\n
=====
Ознака      Име      Стопа      Порез\r\n
А           VAT      9.00%     40.00\r\n
-----
Укупан износ пореза:      40.00\r\n
=====
ПФР време:      01.03.2022. 11:00:22\r\n
ПФР број:      DX7SFSW9-DX7SFSW9-26\r\n
Бројач рачуна:      19/26ПП\r\n
=====
===== КРАЈ ФИСКАЛНОГ РАЧУНА =====\r\n",

```

```

"qr": "https://sandbox.suf.purs.gov.rs/v/?
v1=A0RYN1NGU1c5RFg3U0ZTVzkaAAAAEwAAAGBbAwAAAAAAAAABf0TsdvAAAAG1NzY1NzY1NpdxbnhjBDAA0HAIYY
%2FZ4XXhXmnIHfkaq9jxFym14FLaDozyJJ96A5H%2FVpfs9bHfYHny0K08GGwoUvd7wSqyh%2BU7j
%2FDvn9OXcUPHM%2BwVhOcS7qGBs0iQFD2Uz2k6T60401B%2FQ1FC5FIE7Q2KyHol9w%2FOQFp0krclKtrw
%2FucXQBsQQ4u2Q8HFfX08B0%2FgJyEluwY5ABYaKvUCh6hnh9Y4WLTgE0RdeA9pe
%2FMPoRdGDib0sWz7bRHjvAGsaNjovzAraTx3Ar%2FcEzzoL5svuQrMYft6%2FCXpm2GQG
%2F4XajL7NXBcgu48sEqGSXFPCnCr0I8NlulecRlS5sAfOMRnfltnXQKKiE%2BaEmhruJUV083WGthwXfyldLsMew
%2FFtxiGU%2FRjkmkgQZCvvB%2B1LAdAUjsme1JrhRhwM44G%2B0S%2BtjtGHry%2FNmU%2FBR%2FXoa
%2FFgaSvDbBFjka7YX6WVK7iAPqGopDYZ0X4tvcu7m6%2FF%2BWvK%2BA9fn98aED6%2Bdf9gCK1DMJ7EVgcIZS
%2BJSyD2y9VPqu6NE7ILJK2cImCv2c72YPdhkdfedmyG3I7aZoRdtg7nydMT4VwB4itFbDH6MGUyRmL9RT5NR24rh
yi%2B57z6JTr%2F1lZ8587NLzZyAyJxIorFQSWk0EF7uboXP
%2BMA2g5%2FfrOmnyowNs53UiYBcx4qx14csRiUgzB6jlb28KvUUsh7rWG4LxYg%3D%3D"
}

```

Parametar (body):

“text” – tekst koji šalјemo na štampu. Svaki red se mora završavati sa “\r\n” (String)
 Dužina reda je 40 karaktera (za termo rolnu 58mm) ili 48 karaktera (za termo rolnu 80mm – model FP-700MX)
 Poslednji red teksta (u ovom primeru: =====KRAJ FISKALNOG RACUNA===) se štampa ispod QR koda, ukoliko je naveden.

Moguće je štampati **bold**, *italic*, underline, **DOUBLE HEIGHT** i **DOUBLE WIDHT**:

Primer:

```

"text": "@1@BOLD@1@\r\n@2@ITALIC@2@\r\n@3@UNDERLINE@3@\r\n@4
@DOUBLE HEIGHT@4@\r\n^D^O^U^B^L^E^ ^W^I^D^H^T^H\r\n"

```

“qr” – tekst koji se konvertuje u QR kod (String)

Mogu se zadati istovremeno polja “text” i “qr”, ali i pojedinačno.

Napomena: za štampu freetext-a automatska štampa fiskalnog računa mora biti isključena (“auto_print”:0)

Prikaz informacija na eksternom displeju.

Method: **POST**

URL: `"/api/datecs/ex_disp_ctrl"`

Primer JSON:

```
{  
  "exDisplayTopRow": "Dobar dan!",  
  "exDisplayBotRow": "Kasa je slobodna"  
}  
  
{  
  "exDisplayTopRow": "Upaceno: 2000.00",  
  "exDisplayBotRow": "Kusur:1200.00"  
}
```

Parametar (body):

`"exDisplayTopRow"` – tekst koji prikazujemo u gornjem redu, maks. 20 karaktera . (String)

`"exDisplayBotRow"` - tekst koji prikazujemo u donjem redu, maks. 20 karaktera . (String)

Slanje praznog stringa briše prikaz na displeju.

Napomena: Podržani su displeji DPD-201 i DPD-501, korišćeni na prethodnim modelima fiskalnih štampača FP-550 i FP-600.

Otvaranje fioke

Method: **POST**

URL: `"/api/datecs/open_drawer"`

Ovaj request ne sadrži body.