

Features & Utility of Paradigm EXC 6700-I

- Paradigm EXC 6700 - I has been specially designed for Indian Currency Notes in affiliation with a leading Japanese company, considering the requirement of a perfect and 100% accurate Automatic Fake Currency Note Detector.
- Paradigm EXC 6700 I has been tested by Cabinet Secretariat (R & A W) and other government agencies (concerning to the problem of Fake Indian Currency Notes) and have found it to be 100% Accurate on detection of Fake Indian Currency Notes.
- Other detection devices or machines like UV/White/IR light - magnifiers fitted equipments, loose note counters and Note Sorting machines (NSM)/ Desk Top Sorters (DTS) are inaccurate for detection of fake notes at cash desks as compared to Paradigm EXC 6700 I.
- Paradigm EXC 6700 I works as Firewall against infiltration of fake notes on cash desks and helps the banks in compliance of RBI's Master Circular on detection & impounding counterfeit notes RBI/2009-2010/91 DCM (FNVD) No. /16.01.05/ 2009-2010 dated July 01, 2009.
- Paradigm EXC 6700 I effectively scans various highly complex security features only in 0.6 second per note i.e. 60 seconds for 100 notes stacked at a time.
- Paradigm EXC 6700 I Displays error codes to indicate abnormalities of security features on Doubtful notes, for proper validity adjudication.
- Paradigm EXC 6700 I Processes mixed denominations of Rs 100, 500 and 1000 and work as Value Counter and can display number of notes and corresponding Values of each denomination as also that of all processed denominations in their aggregations.
- Paradigm EXC 6700 – I can easily be adopted to new design of Indian Currency Notes which are issued by Reserve Bank of India from time to time.
- Paradigm EXC 6700 I has user friendly smooth & time saving operation coupled with its benefits of being compact light weight and portable.
- Paradigm EXC 6700 I saves huge value losses on account of acceptance of fake notes due to human mistakes arising out of natural, variable and subjective limitations in human aptitudes of manually checking through visual and touch feel inspection.
- Paradigm EXC 6700 I offers mental ease to cashiers and simplifies their job as the do not need to go in the natty – gritty & intricacies of the various security features in the notes, the machine with its high end sensors will do that for them hence increasing their efficiency.
- Creates deterrent impact on fraudulent Cash Depositors at Cash window and thereby checks the inflow of fake notes at the root.
- Paradigm EXC 6700 I detect the FICNs but also can detect Fake foreign currencies viz US dollar, Euro, Sterling Pounds, Japanese Yen, useful to Foreign Exchange dealers.

COMPARISON OF PARADIGM EXC 6700-I WITH OTHER DETECTION DEVICES AVAILABLE IN THE MARKET

	PARADIGM EXC -6700 I	SORTERS	LOOSE NOTE COUNTERS UV TUBE LIGHTS	PACKET COUNTERS WITH UV TUBE LIGHTS	UV TUBE LIGHTS WHITE TUBE LIGHTS, MAGNETIC KNOBS ETC WITH BUZZERS	SINGLE NOTE DETECTION DEVICE FITTED WITH SENSOR SYSTEMS
Basic Functions	Detection of Fake notes @ 100% accuracy- with the display of reasons of rejection thereof in terms of Error Codes- with the help of most sensitive and high end sensor systems checking most sensitive security features in details to find out probable most likely thin margin of difference between features of valid notes and fabricated features on fake notes.	Quality sorting & note orientation arrangements or sorting notes carrying Ashoka Pillar, with the help of color and light sensors. checking color of the notes with respect to soil ness and spoilage on the notes without going into the details of security features of the notes to find out thin margin of difference between features of valid notes & fabricated features on fake notes , resulting into passing of fake notes as genuine unless substantial difference of color is detected between valid and Fake Notes which generally available in poorly fabricated Fake notes.	Counting and Batching of loose notes.	Counting and Batching of stapled notes.	Visual Verification of the surface of notes under UV lights or white lights or magnifying glasses, or by rubbing the notes on the magnetic knob.	Detection of fake note with most accuracy
Nos. of notes processed	Maximum 100	Maximum 300 -500 depending upon the type of model	Maximum 100 to 300 depending upon the type of model	Maximum 100 notes	Maximum 2-3 Notes	Maximum 1 note
Prices Range	App. 3,51,000 to 4,00,000	App RS 5,00,000 to 30,00,000 depending upon the model	App Rs. 5,000 to 15,000	App Rs. 25,000 to 40,000	App Rs. 1,000 to Rs. 5,000	US Dollar 300 to 2500
Useful at	Cash Desk & Currency Chests of Banks as is compact, lightweight & portable.	Currency Chests only & can not be used at Cash Desk of Banks where sorting of quality never have been carried out as the same are meant for customer services of receiving or tendering cash from/to the customers. The size of such machines is non compact heavy weight and non portable.	Have been used at Bank Counters but have been proved failed in detection function. Useful for counting function.	Have been used at Bank Counters but have been proved failed in detection function. Useful for counting function	Have been used at Bank Counters but have been proved failed in detection function.	Not useful in the Banks which ONLY handles Indian Notes but useful to retail exchange dealers abroad.
Speed Accuracy combination	100 notes 50-60 Seconds –most optimum and technically Balanced speed for perfect judgments of Validity of notes on the basis of detailed scanning of large number of security features with end number of interrelated permutations and combination relationships.	100 Notes 4-6 seconds Optimum for quality sorting but too high for detection function resulting to inaccuracy of detection with precision. The accuracy of detection is scarified basically due to high speed which cant provide required technical time for checking end number of interrelated permutation & combination relationship amongst the varieties of security features of the notes.	100 Notes 4 seconds Optimum for counting but too high for detection function resulting to inaccuracy of detection with precision.	100 Notes 4 seconds Optimum for counting but too high for detection function resulting to inaccuracy of detection with precision.	Wastage of time with no accuracy. Incomparable.	One by one manual insertion of single notes. Accuracy with time consumption in handling notes one after other. 100 notes may take 15 to 20 minutes.

<p>Incidental & ancillary Functions</p>	<p>Also helps in Sorting notes into Recyclable & Non –recyclables (with manual removal) of non recyclable notes, With the help of error codes.</p> <p>Many detailed criteria of detection of fake notes are taken care of which automatically takes care of color and spoilage differentiation to reject non recyclable notes though valid.</p>	<p>Detection function on the basis of low end light sensors – detects toy & Jolly Notes only and does not detect super Fake Notes. Does not offer reasons of adjudication-dependant on color and spoilage of notes for sorting & detection without checking most sensitive security features in details as the criteria of quality sorting are all together different to the criteria of detection of fake notes which scientifically impossible to be embodied in the machines mainly due to high level incompatibility of transport systems and sensor positions on strategic locations due to basic technology being friction – fins type and not belt driven unable to offer required alignments amongst various sensors, check points and strategically locations of security features on valid notes.</p>	<p>Detection function. Capable of detecting the plain or printed papers of low security elements. Most inaccurate to detect even Jolly or toy type fake notes</p>	<p>Detection function. Capable of detecting the plain or printed papers of low security elements. Most inaccurate to detect even Jolly or toy type fake notes</p>	<p>Detection dependent on natural, limited, subjective, varied, human aptitude which in no case can check hidden invisible security features though eyes or touch feel. Can detect jolly or toy type notes but not super or skilled fully fabricated fake notes. Most inaccurate method for 100% accuracy</p>	<p>Informative on number and value of notes checked.</p> <p>NOT AVAILABLE FOR INDIAN RUPEE NOTES.</p>
<p>Note Movement technology</p>	<p>Belt driven- having perfect alignment with various sensors, check points, strategic locations of security features on the notes resulting into 100% accuracy as detailed and perfect checking of all check points can be carried out.</p>	<p>Friction type –fins driven – causing imperfect alignment amongst sensors, check points and strategically location of sensitive security features of notes as a result of drastic wobbling of notes during transportation not permitting perfect required alignments & Checking have to be made only with the low end light and color sensors which do not need such alignments resulting into non availability of accuracy of detection but for quality sorting to a great extent.</p>	<p>Friction type –fins driven – causing imperfect alignment amongst sensors, check points and strategically location of sensitive security features of notes as a result of drastic wobbling of notes during transportation not permitting perfect required alignments & Checking have to be made only in support of UV tubes.</p>	<p>Suction type</p>	<p>Manual handling</p>	<p>Belt driven</p>
<p>Jamming Problems</p>	<p>Almost Non: easily recoverable in case notes get jammed – does not damage the notes</p>	<p>Frequent due to friction type high speed fins driven transport systems- Causing troubles in recovering the jammed notes- most likely damaging notes during recovery from the machine.</p>	<p>Frequent due to friction type high speed fins driven transport systems Causing troubles in recovering the jammed notes- most likely damaging notes during recovery from the machine</p>	<p>No Jamming Problems</p>	<p>No Jamming problems</p>	<p>No Jamming Problems</p>
<p>Break down Cycle</p>	<p>Very low</p>	<p>Frequent due to inherent complicated mechanical designed</p>	<p>Frequent due to inherent complicated mechanical designed</p>	<p>Very Low</p>	<p>NON</p>	<p>NON</p>

Passing of Fake Notes	Invariably makes it impossible to pass fake notes as detection of Fake notes is the Basic functions and is designed for 100% accuracy.	High chances of passing fake notes as main function is just to judge the quality but not the validity of the notes and is mainly dependant on sensor systems to judge the color and spoilage of notes.	High chances of passing fake notes as main function is just to judge the quality but not the validity of the Note.	High chances of passing fake notes as main function is just to judge the quality but not the validity of the Notes.	High chances of passing fake notes as main function is just to judge the quality but not the validity of the	NON
Frequency of After sales services	Except for periodical cleaning of sensors by cotton buds, no maintenance is needed as most of the spare parts are non moving except for belt & rubber rollers.	Frequently needed as the machine is electro mechanical having most of the parts moving in high speed causing much wear and tear to many parts needing frequent attention of service engineers	Frequently needed as the machine is electro mechanical having most of the parts moving in high speed causing much wear and tear to many parts needing frequent attention of service engineers	Very Low	NON	NON
Nabbing of fake notes at root level of deposits in the Bank	Most suitable	Un - suitable	Un - suitable	Un – suitable	Un – suitable	Suitable in Developed countries where cash handling is minimum
Capacity to differentiate security features	Very high to serve the purpose of Fake Note detection as it is meant for identification of Fake Notes	Relatively very low as it is basically meant for quality sorting of notes	NON	NON	NON	Very High
Compliance of RBI's Master Circular on detection of Fake Notes	Fully supports to detect fake notes on cash counters of Banks	Marginally support the currency chests of the Banks but with lot of uncertainty.	Impossible	Impossible	Impossible	Not Applicable
How speed works	In half of second it verifies the notes and gathers lot of information on number of notes, denomination, value of notes and provides error codes indicating mismatch of fake notes with the valid notes.	Just checks the quality of notes and hence high speed is justify for quality sorting but high speed destroys the accuracy of detection and hence can not function as fake note detector	Needless to mention	Needless to mention	Needless to mention	It verifies the notes and gathers lot of information on number of notes, denomination, value of notes.
Cost Benefit to the users.	Avoidance of monetary losses on A/c of rejection of Fake Notes at cash desk	Saves time and monetary loses on account of sorting notes	Cost reduction on account of speedy counting	Cost reduction on account of speedy counting	Useless at Bank Branches or currency chests	Good at cash counter.