MECHEL

Logistic Scale

"Logistic Scale" is a special solution for making weighment of parcels and getting all the required parameters automatically without any manual effort. These important parameters necessary for courier, logistics and e-commerce company's may include length, breadth, height, weight of a parcel and the volume, comparable courier charges generated there off. Length measurement is based on sensors and weight measurement is based on load sensors.

Activity of weighment cum measurement can be saved as a record, can be printed on normal 80 column printer & softcopy of report can be taken into pen drive.

Hardware Features

- Sophisticated operations powered by 32 bit ARM processor
- Multi step calibration, smart calibration supported by 24bit ADC
- Three sensor connectivity for L , B, H
- High end protection against lightning and surge using improved SMPS
- Front mount GLCD display
- Memory of 1 lac data records
- RS232 communication for continuous weight transmission/ modem connectivity
- Pendrive dumping to get data records in softcopy.
- Dot matrix printer connectivity using centronics / USB port
- USB keyboard connectivity

Other Features

- Simple process for weighment
- 10 entries in ticket for 25 characters each
- Facility to view/print earlier saved records according to RST no/ AWB no
- Easy installation setup and its restorable backup into pen drive
- Engineer login for security
- Multiple SMS features for ease of weighbridge owners and clients
- Code creation facility

Optional Features

- GST taxation feature
- Operator logins for 5 operators
- Print on selective models of Laser printer

Sample Weighment Ticket

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ABC CARGO SERVICES                MATERIAL TYPE : ELECTRONIC GOODS
INDORE                            WEIGHT :  17 KG
28/9/19 17:51                     LENGTH X BREADTH X HEIGHT : 42 X 24 X 21 CM
DOCKET / AWB NUMBER : X12332101   VOLUME :  21168 CM SQ
ABC EXECUTIVE : A B PRASAD        VOLUMETRIC WEIGHT : 4.23

SENDER : CYB COMPANY              CHARGES PAYABLE AS PER 17 KG ARE
CITY : INDORE                     BY SURFACE    :    RS
                                  BY AIR        :    RS
RECEIVER: ABS COMPANY             BY SPECIAL AIR SERVICE :   RS
DESTINATION : HYDERABAD
```

Optional Advanced features

that can be provided on customization are:

- Print on thermal printer
- Print on label printer to yield stickable label along with barcode.
- SMS / Email feature using GSM Modem and SIM
- Ethernet TCPIP for integration with PC
- Cloud hosting of data for making it available on central server
- GPS device connectivity for portable collection scales, for weighment location information
- Multiple automatic calculations and results
- Accuracy of measurement upto 5mm in each axis
- Multiple such scales can be networked using RS485

Advantages

- Automation of measuring process
- Faster working
- Less errors
- Less losses

Scope of Supply

- Weighing Indicator for "Logistic Scale"
- Weighing platform equipped with loadcells
- Three Sensor with mounting arrangement

Applications

1. Courier Cargo Services
2. Logistics divisions of industries
3. E-commerce companies

Technical Specifications

Processor	32 bit ARM processor
Processor clock	50 MHz
Real time clock	On board battery backed RTC
RTC clock frequency	32.768 KHz
Memory	On board memory to save 1 lakh records
Power supply	SMPS power supply
Input voltage	90V to 270V AC @ 50Hz
Protection	750mA fuse for input AC mains
	Input line filter for EMI and RFI suppression
	Spike suppressor for input transients
	Opto-isolation of signals and I/O's for high immunity from electrical noise
Power consumption	10 VA (approx.)
A/D converter	Sigma Delta type with 24 Bit resolution
A/D clock	20 Hz
Conversion speed	Internal 25 samples per second
Load cell excitation	8V DC with current capability to drive up to 12 load cells of 350 ohms input resistance
Signal sensitivity	0.3 micro volt per division of weight (unit weight)
Display	12cm x 4cm Graphical LCD with blue back light
Keyboard port	101-key with USB connector compatible keyboard. (Recommended for use Logitech or Microsoft)
USB Port	USB Port configured for Pen Drive/ DMP printer
Printer port	Isolated Centronics compatible printer port to connect 80-column dot matrix printer for printing of weighment record and reports
Serial port	Isolated RS-232 serial port for continuous weight transfer/modem connectivity
Remote display port	To connect external display 1/2", 1", 2.3" & 4"
Environment	Operating temperature: 0° to 55° celsius
Humidity	up to 95% RH non-condensing