

Technical Specifications of OBU-4.1: Integrated Bus Display Controller

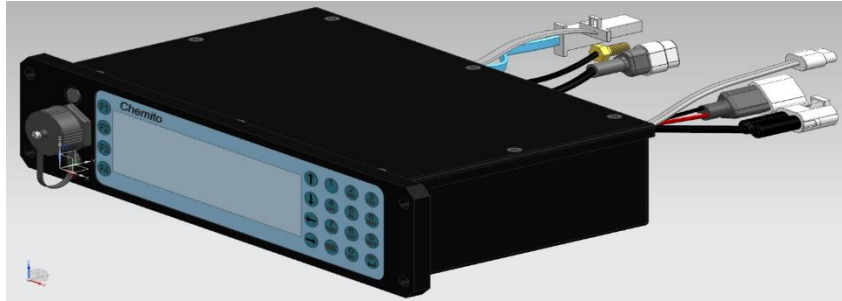
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Purpose	Integrated Bus Display Controller
From	Chemito Infotech Pvt. Ltd
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Prepared By	Reviewed By	Approved By
Name: Shital Ujjainkar	Name: Naresh Panchal	Name: Vishwas Punekar
Signature:	Signature:	Signature:

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1.0.0R00	--	Original Document	Yunoos Desai	Naresh Panchal	Vishwas Punekar
1.0.0R01	02/01/2016	<ul style="list-style-type: none">• Added new nomenclature• OBU-4.1	Shital Ujjainkar	Naresh Panchal	Vishwas Punekar

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OBU-4.1: Integrated Bus Display Controller



A) DIMENSIONS:

Cabinet Size	240 x 133 x 61 mm
Display	Graphic LCD 64 x 256 Pixels with back light

B) INPUT – OUTPUT CONNECTIONS ON REAR SIDE CABLE:

Power Connections	90 series 3 pin connectors
Data connections for display	90 Series 3 pin sealed Female connector to drive destination displays on RS 485
GPS Connections	Gold plated SMA connector for GPS antenna for in built GPS or 90 series 2 pin connector for RS 232 channel for external GPS receiver
Audio Output	2 Channel -20W - 4/8 Ohms
Mic Input	Mic Socket provided

C) ELECTRICAL PRAMETERS:

Operating Voltage	Nominal: + 24V DC /+ 12 V DC
	Optional: Extended Supply 9 V to 36 V DC
Power Consumption	0.1 A @ 24V DC
Protection	Power supply input is protected against Reverse Polarity, Over-voltage, Cranking voltage, Load Dump
	External Fuse on cabinet for over current
	Communication lines are protected against high voltage application and ESD

D) STANDARD COMPLIANCE:

EMI/EMC	Test complied as per – AIS 004 Part 3
Ambient Environment	Operating temperature: -10°C to +55°C
Humidity	95% RH
Vibration Test	10g as per AIS 012
Ingress protection	IP 66 as per IS / IEC 60947-1:2004 in conjunction with IS / IEC 60529:2001
Complied DVVP	As per Ashok Leyland and TMML

E) STRUCTURE:

1.	Aluminum Cabinet, Powder Coated finish.
2.	Weight – 1.5 kg
3.	Mounting arrangement by wall mounting
4.	Automotive grade components used, with conformal coated PCB boards

F) TECHNICAL FEATURES:

Information on Single or Multiple line fonts on GLCD
20 keys Alpha Numeric, Function, Arrow Keys
Downloading of bitmap & LAT LON through USB Pen Drive
Built in memory with 8 GB. For Route & 2 GB for Audio Files.
Interactive keys for smooth operations
Option for External GPS trackers with NEMA 0183 or Built-in GPS receivers is available
IBDC supports various options of number of languages in sequence, Stop announcements, messages, music, etc. via PC software programming.
IBDC supports operation of displays & announcement for 150 routes, 300 destinations & 50 bus stops in each route
IBDC provides a facility of manual skipping of bus stop announcement
Supports functions selection by using Route No., Sr. no., Skip Next Stop operation, volume control for audio, displaying LAT LON on move.
GPS triggered display with next stop on Inner sign is synchronized.
In event of GPS failure Stop information can be initiated manually
Driver can press 1-9 keys to display pre-decided information on Inner sign & announce pre-recorded message.
Functionality of Display 'clock'-GPS based or 'Default Messages' on Inner sign
Back office is able to check, via Bus Controller, the version of firmware loaded on the signs

OPTIONAL FEATURES:

GPRS Connections with Gold plated SMA connector.
Two-way communication with central control center (CCC)
Possible to change/choose/select a 'route' remotely over the air from back office and provide current route information to back office
It should be possible to transmit ad-hoc messages (English) from back office to internal sign