

INDUSTRIAL HEAVY DUTY DIGITAL WELDER

DigiCon
Inside

aps[®]
Innovate



LUMINA 600

MIG/MAG Welding

TIG Welding

SMAW / ARC / Stick Welding

TECHNICAL SPECIFICATIONS

Input Specifications

Input Supply: 345 - 500VAC, 3Ph, 50/60Hz
Input @ 600A / 44V: 32.6KVA / 41.6HP, 45A@415V
Input @ 465 / 38V: 22KVA / 28.3HP, 31A@415V
Input @ 380A / 35V: 16.6KVA / 21HP, 23A@415V

Mechanical Specifications

(Power source with wheels)
Dimensions (LxWxH): 650x345x760mm
Weight: 71KG
Power Source + Wire-feeder + Trolley
Dimensions: 1010 x 600 x 1400mm
Weight: 91kg

Output Specifications

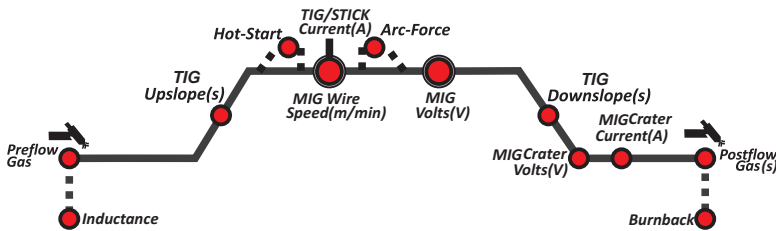
Output Current Range: 10A to 600A
Duty Cycle @ 60%: 600A/44V
Duty Cycle @ 100%: 465A/38V
Open Circuit Voltage(OCV): 70V

MIG Cycle Parameters

Inductance: -8 to +8
Prewlow Gas: 0-25secs
MIG Speed: 0.8 - 22m/min
MIG Voltage: 14 - 42V
Crater Current: 0.8 - 22m/min
Crater Voltage: 14 - 42V
Burnback: 0.1 - 5sec
Slow-Start-Level: 10-90%-

Protection Features

OT - Over Temperature (when internal temperature more than 70°C)
SP - Phase loss protection (when any phase is not present)
UV/OV - Input supply protection (when supply is <330V or >500VAC)
OC - Over Current (when over current flows through IGBT)

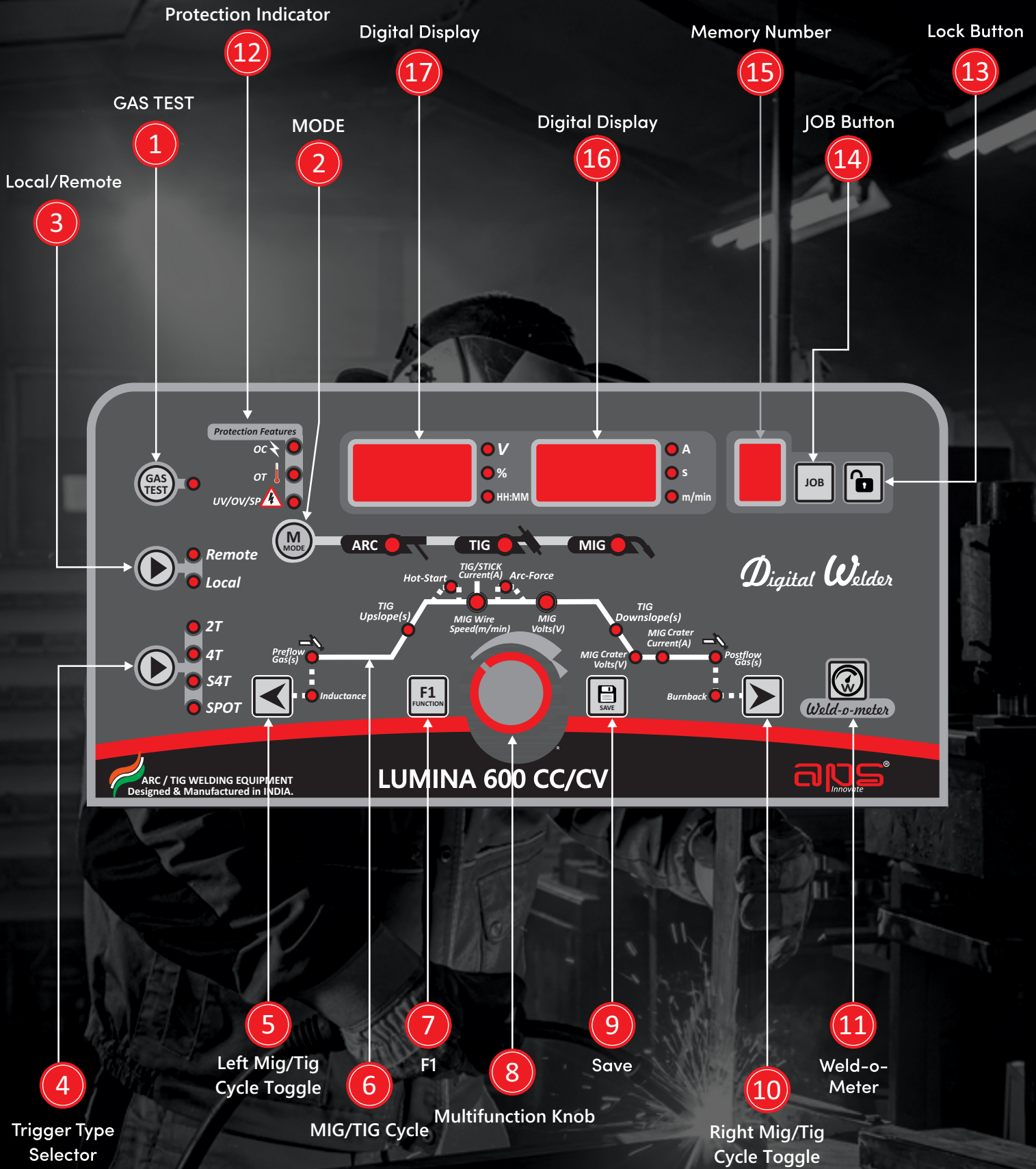


A Complete MIG Cycle with all parameters adjustable precisely using a single knob. All thanks to our "DigiCon Technology". Every parameter being set is visible on the display to the user making the interface very simple and user friendly.

Its no secret that power components like IGBTs, Diodes and Rectifiers need to be operated reliably in harsh environments. That's why APS takes extra measures in designing its products, by isolating these components completely with steel compartments, we ensure their reliability when operating in extreme environments.



Front Panel Description



Front Panel Description

- 1. GAS TEST:** Check and set the gas flow rate without welding. This has an auto shut of after 10 sec.
- 2. MODE:** Toggle button to select welding process of ARC, TIG, MIG.
- 3. Local/Remote:** Toggle button to select Amp control using Panel or Remote.
- 4. Trigger Type Selector:** Toggle button for select 2T, 4T, S4T, Spot mode of torch trigger operation.
- 5. Left MIG/TIG Cycle Toggle:** MIG/TIG cycle parameter toggle to the left.
- 6. MIG/TIG Cycle:** MIG/TIG cycle with adjustable parameter indicator.
- 7. F1:** Function button to set, remote selection, spot timer, Slow-Start Level and automation functions.
- 8. Multifunction Knob:** Encoder to set parameters.
- 9. Save:** Save button to return to save parameter.
- 10. Right MIG/TIG Cycle Toggle:** MIG/TIG cycle parameter toggle to the right.
- 11. Weld-o-meter:** Used for checking actual welding hours. Track welder productivity.
- 12. Protection Indicators:** Fault/Protection indicators.
- 13. Lock Button:** Lock button to Lock an unlock the Panel using a 3 digit digital password.
- 14. JOB Button:** 10 programmable memories to store welding parameter for ready reference and usage.
- 15. Memory Number:** Memory number indication to select the storage location.
- 16. Digital Display:** Digital display to show Current (A), Time (s) and speed (m/min).
- 17. Digital Display:** Digital display to show Voltage (V), Percentage (%), Weld-o-meter time (HH:MM).

An Ergonomic digital front panel enhances ease of operator and ensures a fatigue free operation for hours together. An easy to understand operating panel helps the welder to learn quickly and adapt to the machine. Gone are the days when the welder has to adjust and tune himself according to the machine, the LUMINA series makes sure that the welder is able to quickly set the machine and concentrate his core job "WELDING". LUMINA has also ensured welder comfort by with AUTO STOP feeder mechanism that stops feeding wire when not welding.



The Complete MIG Welding Package

Specifications of Wire Feeder

Wire Diameter (mm): 0.8-1.6mm

Wire Drive Motor Type: PMDC

Drive System Type: 2/4 Roll

Wire Speed Control: Linear Supply 0 to 20V

Dimensions(LxWxH): 635x240x450mm

Weight: 12 KG



- » **Weld-O-Meter**
Record welding arc timer and view it on display. Ensure productivity.
- » **Storage Programs**
Upto 10 Storage programs for easy recalling of parameters.
- » **IN-Built HF Unit**
High frequency non touch start feature
- » **IP-23 Rated All Steel Enclosure**
Suitable for outdoor and tough industrial environments.
- » **VRD for welder safety**
Reduces Open Circuit Voltage to ensure welder safety.
- » **Fan -On-Demand**
FOD reduces power consumption and dust ingress.
- » **Foot-Pedal / Remote**
Improves welder ease by giving complete control
Option to select Peak Current or Base Current via remote.
- » **Heavy Output Terminals**
Lug type / Euro heavy duty rated terminals.



IGBT
Module

3
PHASE

CC

DC

FOD

Weld-O-Meter

LOCK

A) Lumina 600 power source with wire-feeder with interconnecting cable 5 meter and 70sqmm N36-ER70 MIG Torch, Earthing Clamp set 3 meter with 70 sqmm cable Preheater, Co2 regulator, Flowmeter.

 Order Code : APS - L600



B) Welding machine trolley with swivel support for wirefeeder. Welder accessories and tooles storage bay and cylinder holding facility.

 Order Code : APS - L600 - TROLLEY

ACCESSORIES AND PACKAGES



1) Electrode Holder 600A with 3 meter 50sqmm cable

 Order Code: AEH600A3M70SQ

2) Electrode Holder 400A with 3 meter 50sqmm cable

 Order Code: AEH400A3M50SQ



3) Earthing Clamp 600A with 3 meter 70sqmm cable

 Order Code: AEC600A3M70SQ

4) Earthing Clamp 400A with 3 meter 50sqmm cable

 Order Code: AEC400A3M50SQ



5) Interconnecting Cable 5 meter 70sqmm.

 Order Code: ICC5M70SQ

6) Interconnecting Cable 10 meter 70sqmm.

 Order Code: ICC10M70SQ

7) Interconnecting Cable 15 meter 70sqmm.

 Order Code: ICC15M70SQ



MIG Welding (Gun)

1) N36-ER70

2) N60-ER70

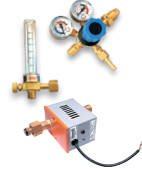
For Torch consumable refer to TORCH Catalog.



Wire Feed Unit

1) Wire Feed Unit - WFSSJ11

2) Plastic Spool Cover - PSC-WFSSJ11



Gas Accessories

1) CO2 Regulator - AREGSSDG-CO2

2) Co2 Preheater - APREHEATER-230VAC

3) Gas Flow Meter - AGASFLOWMTR

AUTHORISED DEALER :