

# ADG-500™

## Dispensing Systems

### Vial and Syringe Dispenser



#### Features

- Dispenses both Vials and Syringe.
- Dose measurement, decay correction, saline dilution, and gas extraction are achieved in one continuous step.
- The accuracy of both systems is within 5% for total activity and within 5% for volume (less than 0.01 ml).
- The systems can manage activity levels up to 2000 mCi at a concentration of 130 mCi/ml.
- Less than 30 seconds is required for dispensing, dilution and gas extraction.
- The operating software serves two main functions.
  - 1) Radiopharmacy function:
    - Selects up to 12 nuclides for dispensing.
    - Enables either one or two dose calibrators to measure activity in the mother vial and activity in the daughter syringe.
    - Performs decay time correction and activity calculation for both the mother vial and the daughter syringe dose.
    - Performs volume calibration and activity concentration measurement for daily QC.
  - 2) Patient Management function:
    - Patient data includes date, injection time, required dose, dispensing dose, ID number, weight, and DOB.
    - Residual activity in empty syringe.
    - Remote display in PET injection room.
    - Patient history data base.
    - Electronically recorded and signed.

#### Description

These Automatic Dispensing Systems are stand-alone modular devices with three components. These components are the pump and valve control unit, the mechanical control units, and the operating software. The automated functions include activity concentration, measurement and calculation, decay time correction, saline dilution, gas extraction, and patient data management.

#### Ordering Information

0670-0026 ADG-500 Vial and Syringe Dispenser



The screenshot displays the software interface for the ADG-500. It includes several panels: 'Calibrator' showing activity measurements (693.717 mCi), 'Clock' showing the date and time (2009/05/25 07:13:12), 'Dose Device' showing volume and concentration (8.761 ml, 79.167 mCi/ml), and a 'Dose schedule' table. The table lists patient information and dispensing details.

Time	Requested activity [µCi]	Dispensed activity [µCi]	ID	Birth date	Note
09:00	10.00	10.00			
Dispensed	F18	0.0			
09:45	10.00	10.00	20090525002		
Dispensed	F18	0.0	Liya		
10:00	10.00	10.00	20090525003		
Dispensed	F18	0.0	Mandy	Female	
11:15	10.00	10.00	20090525004		
Confirmed	F18		Rason	Male	
12:00	10.00	10.00	20090525005		
Unconfirmed	F18		Jiah	Male	